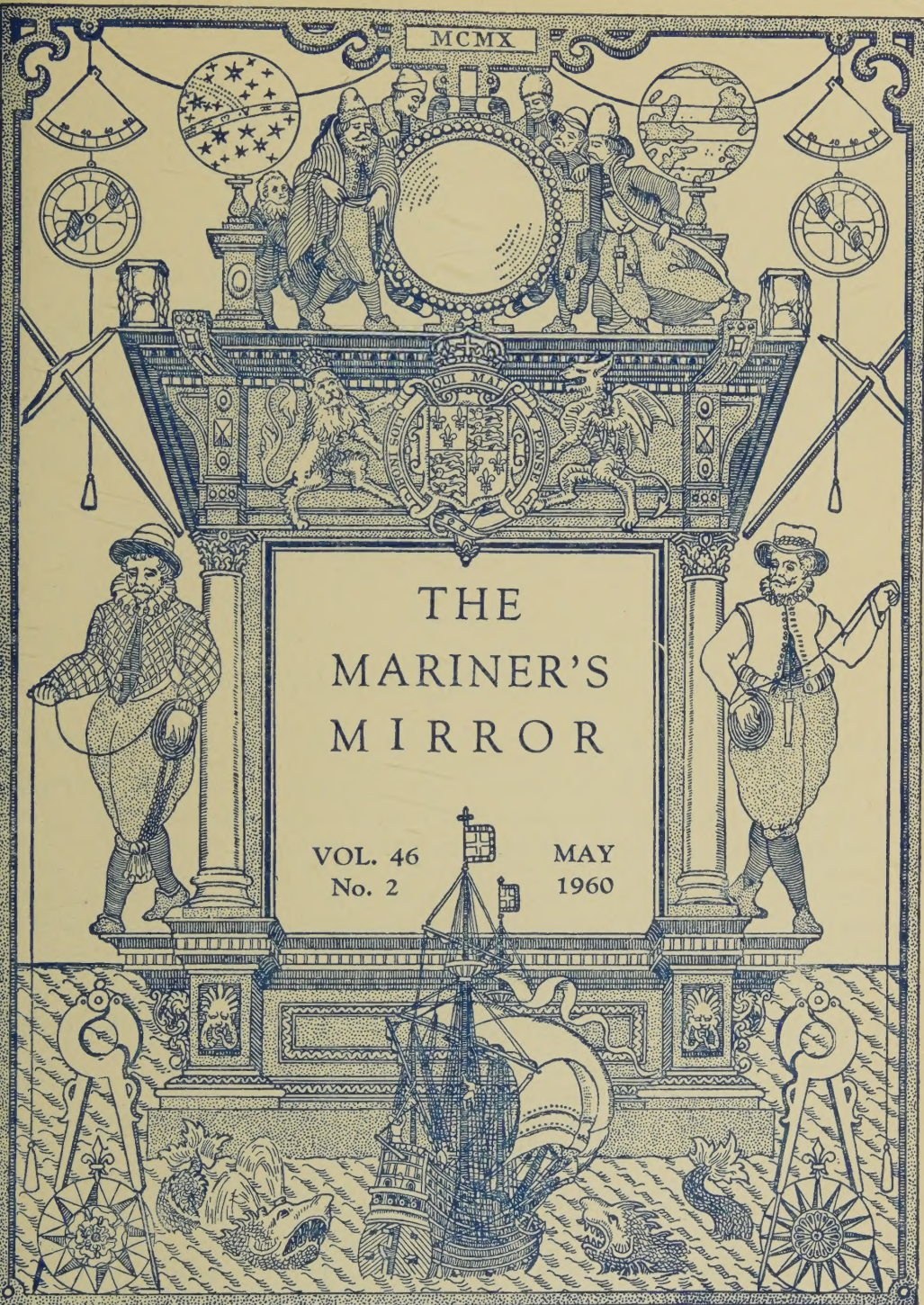




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The MARINER'S MIRROR

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MAY 1960

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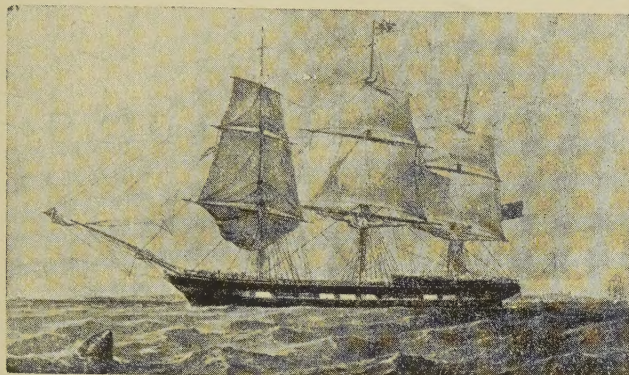
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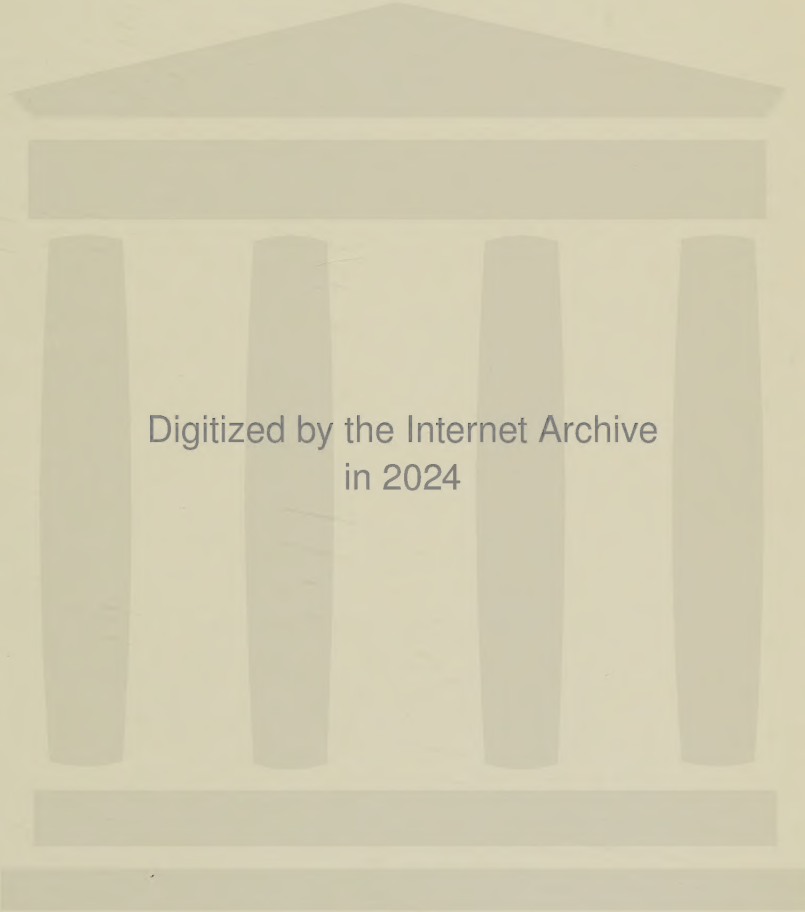


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Mary approaching the quay at Devoran. To-day the river is so badly silted up that only small boats can approach the quay at high water.

Original photograph lent by William Trebilcock of Carnon Downs.

The MARINER'S MIRROR

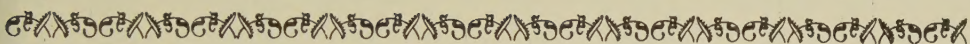
WHEREIN MAY BE DISCOVERED HIS
ART, CRAFT & MYSTERY

*after the manner of their
use in all ages and
among all
Nations*



VOL. 46. No. 2

1960



THE *MARY* OF TRURO

THE LIFE-STORY OF A COASTING SMACK

*By Basil Greenhill and
David R. MacGregor*

WITH DRAWINGS BY DAVID R. MACGREGOR

IN contrast with the profusion of sea-going trading smacks which were built on the banks of the rivers and creeks of South Devon in the second half of the last century it seems that comparatively few sea-going single-masted cargo vessels were launched on the river Fal, the Truro river or the adjoining creeks in South Cornwall. In Chapter 3 of Volume 1 of *The Merchant Schooners* one of the writers gave some account of the schooner building activities during this period of the brothers John and Hugh Eddy Stephens at Yard Point and at Devoran, both on the Restronguet Creek, off Carrick Roadstead. John Stephens built the *Rhoda Mary* which was widely considered among contemporary seamen to have been one of the fastest of British schooners. Besides these larger vessels the brothers launched at least two sea-going trading smacks, the *Gleaner* and the *Mary*, both built in 1875.

The *Mary* was probably built on the west bank of the Pill of Penpoll, just below the footbridge. She was registered as having been constructed

by Hugh Eddy Stephens, but it seems she was designed by a Mr Charles George, who supervised her building. The late Mr Charles Trebilcock senior, of Devoran, saw her launched when he was a small child and he subsequently spent fifty-three years sailing in her. He told the writers in 1952 that she was constructed from a small stock of timber left over from the building of the early Stephens's schooners. There was not enough material left to complete another schooner, and no order for a larger vessel was forthcoming to justify the purchase of more timber, so a smaller ship was built for the stone trade from Porthallow. His second son, also called Charles, has added that she was intended to be able to trade to Plymouth when necessary and that when she was built she was of good size among vessels of her own class.

She was launched in September 1875 and registered as a wooden smack with a running bowsprit. She was of 25·34 tons gross, measuring 49·3 ft. × 17·5 ft. × 5·65 ft., and her official number was 74421. Her first owners were as follows:

Thomas Hicks, of Truro, County Bridge Surveyor	32 shares
Thomas Sampson Woolcock, of Devoran, Merchant	8 shares
John Hitchens, of Devoran, Accountant	8 shares
James Williams, of Devoran, Agent	8 shares
William Rowe, of Falmouth, Shipowner	8 shares

Fifty-two years later, in 1927, a London solicitor held half the shares, Messrs Woolcock, Rowe, and Mrs Williams, widow, still held eight shares each. Mr Hitchens's eight shares had been taken over by Mr Charles Henry Trebilcock, of Devoran, Mariner. Mr Trebilcock was connected with the *Mary* throughout his long working life. His father and his grandfather before him had dealings with her.

The lines of the *Mary* reflect the exacting requirements of the trade for which she was designed. At Porthallow smacks in the stone trade loaded from the beach, or at the best from a small drying quay. Although ketches and even schooners, such as the *Elizabeth Jane* owned by W. K. Slade of Appledore, loaded or discharged on the beach at rare intervals it was a difficult and dangerous place to trade into. At Devoran, even in those days when the quay was quite busy with shipping, there was no great depth of water and the *Mary* was required to be able to reach the quay even on neap tides. She was also required to be able to work up any of the shallow creeks of South Cornwall.

The result was a hull in which shallow draught was compensated by exceptional breadth. The proportion of length to breadth was as low as 1:2 $\frac{3}{4}$. This considerable beam gave her ample cargo capacity and made her

very seaworthy. It also enabled her to carry after the first few years of her life a very tall sailplan for her length, which proved a great asset, because she was able to make use of the breeze coming over the banks and trees lining the secluded creeks into which she had to trade.

The lines of the *Mary* were taken off by the writers in 1948 when she was owned in Appledore, and they have been drawn out by David R. MacGregor. The lines are very easy with a clean entrance and well-formed run. The buttock lines suggest a hull formed for fast sailing, as do the slack bilges and slight deadrise seen in the body plan. The hull of the *Mary* was rather pleasing to the eye, rather more so, in fact, than the enormous beam would seem to indicate.

In size the *Mary* corresponded to some of the smallest of the sea-going Plymouth smacks, but she was shallower. Mr Charles Trebilcock senior told the writers that she was designed to draw 5 ft. to 5 ft. 3 in. forward and 6 ft. 6 in. to 6 ft. 9 in. aft when laden, but in practice she was usually loaded to an even draught of 7 ft., at a cost to her sailing qualities. He was of the opinion that a greater draught would have given her a better cargo capacity and improved her sailing qualities without loss to her handiness in trade.

When she was first rigged the *Mary* had a pole mast. Her mainboom, projecting 6 ft. over her stern, gave her a mainsail of 222 yards and she had a foresail and a jib, but no topsail. When Mr Charles T. Trebilcock senior joined her as a boy he determined that she should have a topsail and he worried his father, who was then her master, until the latter agreed. The condition was that young Trebilcock had to cut the necessary hole at the masthead and fit the sheave. An old shipwright of Devoran showed him how the job should be done. The *Mary* was then equipped with a jackyard topsail with a very long yard. When in the course of the years the pole mast was condemned the *Mary* was equipped with a lower mast and fidded topmast. In the early 1920's the lower mast was renewed. By the time the topmast rotted the *Mary* was equipped with a motor, so the topmast was merely shortened, and by 1935 when the elder of the present writers first became acquainted with the *Mary* the topmast was purely ornamental carrying neither sail nor rigging. Eventually it decayed and was removed, but the lower mast was not poled off.

The *Mary* proved a fast vessel throughout her life. Mr William John Trebilcock, eldest son of Mr Charles Trebilcock senior, and Mr Charles Trebilcock junior, gave the writers three stories of her speed. She once sailed back to Falmouth from Looe in company with the 8 knot packet-steamer *Flower of the Fal*. The *Mary* was towing a boat which slowed her down, but she was going so fast that her crew were unable to pull the boat

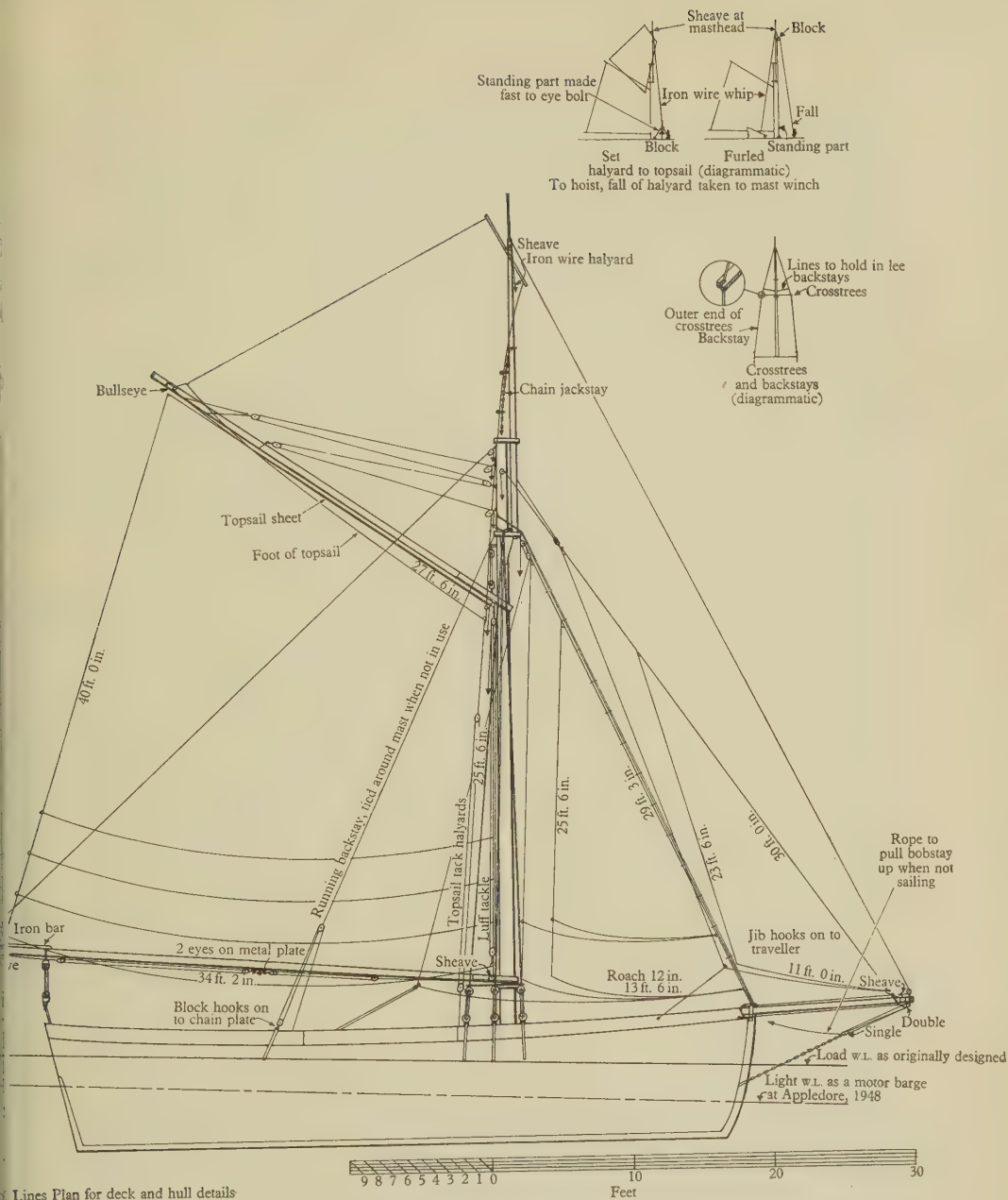


Fig. 2. *Mary*. Sail plan reconstructed from following sources: information including two photographs, supplied by William John and Charles Trebilcock of Devoran, who served in the *Mary* with their father; mainsail, small staysail and small jib from sailmaker's plans (sails cut about 1930); sail plan of trading smack *Mystery* of Truro, drawn by P. J. Oke in 1937, in the collection at the National Maritime Museum, Greenwich; photographs taken by Messrs H. Oliver Hill, Graham E. Farr and Basil Greenhill.

Spar dimensions: mainmast, step to cap, 48 ft.; topmast, heel to truck, 24 ft. 3 in.; bowsprit, outboard, 11 ft. 3 in.; boom, overall, 38 ft.; gaff, overall, 30 ft.; jackyard, 6 ft.

Rigging notes: peak halyards and purchase go to starboard; throat halyards go to port, no purchase; ratlines on port side only between forward pair of shrouds; topmast stay passes through wheel on bowsprit end and thence to deck with lanyard made fast to eyebolt on deck; balloon foresail also set as spinnaker; topsail gear goes to port.

Sail plan drawn by David R. MacGregor, 1958.

up to the transom. Even so, when the wind freshened the *Mary* drew ahead of the steamer, but of course when the wind dropped she was left astern.

She was at her best with a strong wind on her quarter. At one time it was the custom to hoist a black ball at Plymouth and at Pendennis, Falmouth, to mark each hour. On one occasion *Mary* left Plymouth with a fresh north-west wind and at 1 p.m. her crew were just able to see the hoisting of the ball. At 5 p.m. they were just able to see the hoisting of the ball on Pendennis Point.

Perhaps because of her great beam the *Mary* could carry her sail when light, which meant she was particularly fast under these conditions. The third story concerns a voyage to Porthoustock to load stone. The larger Plymouth trading smack *Silex*, also light, neared on the opposite tack and crossed the bows of the *Mary*, but the wind freshened, the *Mary* could carry her sail and the *Silex* could not, and the *Mary* was loaded and outward bound before the *Silex* reached Porthoustock.

The *Mary* spent the first seventy years of her life in trade about the creeks, small harbours and beaches between the Lizard and the Tamar. Her longest voyages were to Calstock. She traded into Port Loe and Coverack. But most of her voyages were always in more sheltered waters, in company with the local river barges of the Fal and the adjoining waterways which existed in their dozens until the First World War. She was known among the river bargemen as the 'little big barge' because her healthy lines, shallow draught and decked construction (many of the river barges were only partly decked) enabled her to compete both with them and with the larger Plymouth smacks. She loaded timber at Gweek for transhipment to steamers waiting in the mouth of the Helford river, she took stone into Gweek and Porth Navas and St Just. She took cargoes to Merthen Quay on the Helford river for John Tyacke of Merthen Manor whose own market boat, the *Rob Roy*, was a small ketch.¹ She took feeding-stuffs from St Mawes and worked far up the Fal river to load bricks.

Later in her life she took many cargoes of stone from Porthoustock to Truro and Tresillian Quay. She used to run in this trade with four Plymouth barges, bigger vessels than herself, the *Sweet May*, the *Silex*, the *Dorothy* and the *Emma*. In the memories of the old men who sailed these small merchant sailing ships they used to go down to Porthoustock in the morning with an offshore breeze, and return in the evening with the wind off the sea. If there was no wind they would pole down the river to Malpas and then pull with sweeps until the breeze made. *Mary* had a crew of two men and a boy. They used to get home about once a week and spent most

¹ Greenhill, *The Merchant Schooners*, Vol. II (London, 1957), p. 64.

of the nights in her little cuddy. In later years bicycles were carried on deck and the crew slept at home more frequently.

In 1926 the *Mary* was fitted with a twin-cylinder Bergius engine of 13 I.H.P. giving her a speed of 5 knots, or, more accurately, 5 m.p.h., as her register records. She continued to work the same trades until 1946 when a dispute among her owners led to her sale to two young Appledore men, Messrs Harris and Lamey. She made an adventurous voyage round the land—the longest voyage of her life, during which she again proved her seaworthiness. At Appledore she was refitted at the shipyard of P. K. Harris and Sons Ltd. as a motor barge for the gravel trade about the Taw and Torridge estuaries. She was equipped with a more powerful engine which had once served in the ketch *Bessie Clark*. As a motor barge trading in sheltered water only, she could load 56 tons of gravel. As a sailing vessel she had once loaded a cargo of 64 tons.

In 1949 she was sold to a firm who used her to carry stone from the Lancut Quarries near Chepstow to repair the sea walls above Sharpness Bridge. It might have been thought that she would end her days carrying the cargo for which she was originally built, but she still had yet another job to do. Mr Grahame Farr has provided the writers with the story of her later days. In 1952 she was busy in a curious trade, the dredging of mud from Newport docks. The concentration of coal dust was so high that the mud could be made into blocks and sold as low-grade fuel. In 1954 she was back in the stone trade, from Chepstow and other Dean Forest Quarries over to the left bank of the Severn. In 1957 she helped in the laying of moorings at the new atomic power station at Berkeley.

In May 1958 she lay in a quiet arm of the Berkeley Canal at Sharpness, showing many signs of her age, but still afloat, in honourable retirement after eighty-three years of work in hard trades on the south-western shores of England.

The writers are indebted to the people mentioned in the text of this article for the information they have most kindly provided, which made it possible to piece together the history of *Mary*. They are also indebted to H. Oliver Hill, who knew the *Mary* long before either of them, to Gordon Harris of P. K. Harris and Sons, Shipbuilders, Appledore, who first suggested the lines of the *Mary* should be taken off and her history recorded, and to Jim Morrison, oyster dredgerman, of Falmouth.

WRECKS IN THE ISLES OF SCILLY

By Juliet du Boulay

EARLY records make plain the importance once held by Wreck in the Isles of Scilly. In 1114, Henry I granted to Tavistock Abbey the churches of Scilly together with the islands which had been inhabited by hermits in the time of Edward the Confessor. On the largest of these hermits' islands, now called Tresco, Tavistock established a priory dedicated to St Nicholas, the other islands covered by the royal grant being Samson, St Helen's (properly St Elid's), and Tean. The Earl of Cornwall retained the remaining islands, which included St Mary's, Agnes, and St Martin's, but very early he gave Nurcho (presumably Bryher) to the monks so that they held all the northern part of the archipelago. In about 1150 Reginald Earl of Cornwall gave the monks 'all wreck that may occur on the islands that are wholly theirs, except whale and whole ship';¹ and one can deduce that the value of the Islands lay to a great extent in this right of wreck from the fact that in 1302, before King Edward I's justiciars sitting at Launceston, the Abbot of Tavistock established his right except for the usual royal perquisites such as gold, scarlet cloth, whale, whole ship,² etc. While Edward I was still alive, they seem to have abused this privilege, for in combination with the lay proprietor and the Friars who had by this time reached Scilly, they imprisoned and held to ransom William Le Poer, the King's coroner, sent to enquire into various crimes of violence and into 'wreck of sea'.³ The priory at Tresco suffered from pirates and raiders during the long wars with France, and by about 1500 Tavistock seems to have disposed of its interests in Scilly to laymen, for the islands are not even mentioned in the final surrender of the Abbey's possessions in 1539.⁴ All the islands were soon afterwards resumed by the Crown, and on 14 December 1570, Elizabeth granted them to Francis Godolphin for thirty-eight years, together with the right of half the wreck, the other half to go to the Lord High Admiral.⁵ Once again it becomes plain that wreck still figured largely in assessing the value of the islands, for Godolphin, defending his tenancy of the islands against a claim by Sir Edward Barkley, says in a letter of

¹ Dugdale, *Monasticon Anglicanum* (1846), Vol. II, p. 501.

² Dugdale, *op. cit.* Vol. II, p. 502, 'in omnibus insulis suis de Sulleye'.

³ R. Heath, *A Natural and Historical Account of the Islands of Scilly* (1750), pp. 183 ff.

⁴ R. Heath, *op. cit.* pp. 197-8.

⁵ R. Heath, *op. cit.* pp. 199 ff.

January 1578, 'as for the benefit of shipwreck, it is not only uncertain, but almost not to be [considered since] that travellers are now become more acquainted with the place, and better experienced in their navigation. [In the 7] years' space that I have been Her Highness' [governor] I affirm on my credit that the wreck hath not been in all £20.'¹ Considering the circumstances in which the letter was written, one cannot be blamed for doubting its truth.

Although we hear Godolphin pleading the paucity of profitable wreck, it was not until very recent days that wrecks have become the exception rather than the rule. Little by little, Scilly became equipped with lighthouses to minimize the danger of shipwreck; Agnes's lighthouse was built in 1680 by Trinity House, lit for the next 120 years by a coal fire in a cresset stirred by a rod, and then, in 1801, provided with Argand Lamps and reflectors. This cresset, with many very fine relics from wrecks occurring in Scilly, may still be seen in 'Valhalla' in Tresco Abbey Gardens. There is a daymark on St Martin's dating from 1687. The Bishop Light was begun in 1847, destroyed in a gale on 5 February 1850, and rebuilt in 1859. Round Island was given a light in 1887, the Seven Stones a lightship in 1841, and Peninnis Lighthouse, superseding Agnes's, was built in 1911.

The rise of steam-powered steel ships reduced the destructive powers of bad weather; and better charts, greater engineering and navigational skill, with the invention of Radar and the recent building of a Decca Station of St Mary's, combine to keep wrecks down to a minimum. But even now the hazards of Scilly are only diminished, not conquered. Fog still remains, and human fallibility and the failure of technical equipment are testified to as recently as in 1955 when the *Mando* struck Golden Ball Bar in a fog, and became a total wreck. On that occasion the crew of the *Mando* very probably owed their lives to the action of the men of Scilly, and this aspect of wrecks in these islands must not be forgotten.

The selflessness of Scillonians in attempting to save life from the sea has, in the past, been underestimated, and Heath undertakes a spirited defence of them:

Ships being sometimes lost on the Coast of Scilly, by the Neglect, or Misconduct of the Seamen, especially in bad Weather, the Merchants and some others, not always made acquainted with the true Cause of those Misfortunes, have an ill-grounded Opinion of the Situation of these Islands, as well as a blind Prejudice to the Disadvantages of the Inhabitants; not distinguishing that Ships are liable to be lost on many other Parts of the English Coast, if due care is not taken by the skilful Mariner.

As to the Scillonians, whom a late Author has reflected upon for their Conduct towards the Merchants and Persons shipwreck'd on their Coast, they are certainly much more known for their

¹ Public Record Office. State Papers. Domestic Elizabeth. Words in brackets are supplied to complete the sense where the MS. is damaged.

Services to Strangers, in such Times of Distress, than the Cornish, or any other Inhabitants on the Coasts of England.¹

In a footnote he substantiates this argument by saying that since the island is under the command of a garrison, atrocities are impossible except with the collaboration of the Commanding Officer.²

The report of the murder of Sir Cloudeley Shovell for the rings he wore is widely known, and less verifiable stories of lanterns on cows' horns, and the deliberate neglect of the Agnes light are circulated. What is not so often recorded, and still less rewarded, are the numerous uncalculated acts of kindness by Islanders to the survivors of shipwreck, and the frequent more spectacular attempts to save life from the sea, where the rescuer himself is in imminent danger of drowning.

Before the establishment of a properly equipped lifeboat system in 1874,³ the islanders used to brave enormous seas in totally inadequate boats, attempting to reach the scene of a wreck without delay. When the *Colossus** (see Appendix) was wrecked in 1798, all but one of the crew were rescued in heavy seas by the islanders, who 'at very great risk, exerted themselves to the utmost in cutters and open boats'.⁴ Woodley⁵ writes that during rescue operations when the S.S. *Thames** (see Appendix) was wrecked in 1841, the women of Agnes watched from a hill-top, expecting never to see their men again.

1 R. Heath, *op. cit.* p. 137 ff.

2 R. Heath, *op. cit.* p. 141.

3 Following a legacy from Mrs Dundas Drummond for the establishment of a Lifeboat Station, the Institute provided a Lifeboat 37 ft. long, 9 ft. wide, 12 oars, which was sent to Scilly on 30 July 1874. An extract from *The Life-boat* (1874-76, p. 223), preceding the announcement of the first lifeboat in Scilly runs: 'For many years it had been in contemplation to station a Lifeboat at Scilly, but wrecks not being very frequent in the neighbourhood of that group of islands, and local difficulties arising, the question had been postponed from time to time.' There seems to have been some negligence on the part of the authorities, and islanders, for the statement about the infrequency of wrecks in the neighbourhood of Scilly is open to doubt, and is not borne out by the statistics quoted in *The Life-boat* (1874-76, p. 411), for wrecks for 1873-74:

East coast	716	N. and W. coast of Scotland	66
South coast	241	West coast	545
Irish coast	213	Isle of Man	7
Scilly	10	Lundy	5

These show that, compared with places of approximately similar size, the Isle of Man and Lundy, Scilly was the greater danger, and in 1874, the Isle of Man had four lifeboats. In that year the proportion of lifeboats to wrecks around the coasts of the British Isles seems to have been 1 to 9, though this gap is lessened through quite a number of these wrecks being too far out to sea to come within reach of a lifeboat. On the occasion of two of the wrecks mentioned in this article, the *Thames* and the *Friar Tuck*, the lack of an adequate lifeboat system was, at the time, noted and deplored.

* Asterisk indicates throughout the presence of relics, from the ship mentioned, in 'Valhalla', Tresco.

4 *Morning Herald*, Wednesday, 19 December 1798.

5 The Rev. George Woodley, *Narrative of the Loss of the Steamer 'Thames' on the Rocks of Scilly*, 4 January 1841.

The rescue of all the survivors of the *Award*,*¹ in very heavy seas, was carried out by the men of Bryher. She was a ship, 846 tons, built in Quebec in 1859. On her second voyage, from Liverpool to New Orleans, in ballast, she came ashore at the north end of Gweal—a little rocky island west of Bryher—and in nine days had become a total wreck. She struck the sunken rocks $1\frac{1}{2}$ miles off Gweal at 1 a.m. on Tuesday, 19 March 1861, and was first seen by the inhabitants of Bryher at about 4 a.m., when the wind had increased to a severe gale from the N.N.W. with a heavy sea. She was slowly driven over the ledges towards the island itself, broadside on to the weather, with 'the sea making fair breaches over her, sometimes as high as the fore yard'. Later the danger of her position was relieved when a sea threw her bow towards the land; and when her foremast went over her bow, still attached to the ship by the rigging, one man managed to get over it to the shore with a line. By means of this, all the crew and their belongings were saved, and later that afternoon an attempt was made to reach them from Bryher. However, it was unsuccessful owing to the strong wind and heavy surf, and it was not until early on Wednesday morning that a boat could with great difficulty be launched over the rocks at low water. 'At great risk of life' the trip was made to Gweal, but the return with some of the survivors could not be made until the next low water in the afternoon, and it took three trips before all the twenty-four crew were safely rescued. It is at any rate a happy ending, which excuses the lightheartedness with which the loss of the *Award* is commemorated in verse composed by Horatio Jenkins, the Abbey boatman, at that time:

The Award from Liverpool did sail
Bound for New Orleans.
She struck upon the rock of Gweal
And went to smithereens.

It is Bryher men too who figure in the story of the loss of the *Delaware*,² which must hold a perhaps unparalleled and certainly unsurpassed place in the history of life-saving in Scilly. The *Delaware*, 380 ft. long, steam-driven, and manned by a crew of forty-four, got into difficulties among the rocks to the west of Bryher on 20 December 1871. It was blowing a heavy gale from the north-west, and when her engines became overheated and had to be stopped, she turned broadside on to mountainous seas and capsized. Men on Bryher who had been watching this tragedy calculated that any survivors would be washed ashore to White Island, and when they saw five men

¹ References for the *Award*: *Lloyd's Register*, 1860; *Cornish Telegraph*, Wednesday, 27 March 1861; *West Briton and Cornwall Advertiser*, Friday, 29 March 1861; *Cornish Weekly News*, Saturday, 30 March 1861.

² *Western Morning News*, 12 October 1855.

clinging to various bits of wreckage, they carried the six-oared gig *Albion* (beam 5 ft. 6 in., length 30 ft.) over approximately 1 mile of rough ground to launch her from Rushy Bay with a following wind and sea. Ten men rowed her to the East Par of Samson, where they carried her 200 yards over rocks, sea-weed, sand and sea grass, to the West Par, where she had to be launched again in the teeth of the gale. They reached White Island successfully, and four men were landed—only to find that the two survivors, remembering tales of the barbaric deeds of Scillonians, had collected stones to defend themselves with! All men were safely taken off White Island, and the *Albion* reached Samson where the crew and survivors transferred to the gig *March*, which had been brought over to render assistance. While they rowed back to Bryher, the *March* crew remained on Samson for the night, and in the morning were joined by every available man on Bryher. These men were never rewarded, or publicly recognized.

Leaving aside the vexed question of deliberate wrecking on the part of the Islanders, there is no doubt that 'wrecking', i.e. loot or salvage from any ship that came to grief within the bounds of Scilly, was a recognized means of livelihood—on occasions the only one. The prayer attributed to Troutbeck, who was the chaplain of St Mary's, near the end of the eighteenth century, shows the light in which wrecks were viewed by the inhabitants of Scilly: 'We pray Thee, O Lord, not that wrecks should happen, but that if any wreck should happen, Thou wilt guide them into the Scilly Isles for the benefit of the inhabitants.' And Heath¹ goes a little further in his account of Agnes: '...more Wrecks of Ships are sent in here by the Sea, than to any other of the Scilly Islands; which make the Inhabitants of it some Amends for their Forlornness of Abode. St Warna,...whom these people invoke, as their Benefactor, in Times of Distress, is supposed to be instrumental in sending these Wrecks, and of directing and presiding over their good Fortune.'

The history of the prosperity of Scilly shows continuous and often extreme fluctuations. The suppression of smuggling around 1800 was a severe blow to Scilly, and preceded the worst-ever period of poverty in the islands, during which life was supported by limpets, wreck, and the growth of a pilot trade which was to be one of the main industries for the next hundred years. In 1818 the poverty was so extreme that an appeal for the barest necessities of life in Scilly was made on the mainland. The people of Penzance responded generously to this appeal, and the Royal Arms of the *Association* was sent to them by the Scillonians in a token of their gratitude. It is now in the Penzance Guildhall, and a picture of it was given to 'Valhalla' by the Mayor of Penzance. In 1840-50 came the great boom in

¹ R. Heath, *op. cit.* p. 89.

shipbuilding, when ships of as much as 500 tons were built at Porth Cressa and the Rechabite Slip in Hugh Town. But the day of wooden sailing ships was nearly over as the sun of steam-powered vessels rose, and another lean period followed in the 'seventies to 'nineties, carried over by pilotage, and the growth of early potatoes. By 1900, the flower industry, from small beginnings in 1880, had become good, and since then, with the addition of the ever-increasing visitors, the islands have never looked back. Yet it is only in very recent days that wreck has taken a back place in peoples' lives, and within living memory there were regular beachcombers who made the rounds of an island's coast at first light every morning in the hope of finding something useful; while there are still some who keep a close watch for bits of timber or dunnage when conditions are promising.

'Wreck' is primarily the term for goods or gear from ships wrecked at Scilly, but it also means goods or timber that drift ashore on the islands from the high seas. Such drift wreck was commoner before the 1939-45 war than it is now, because then there were more deck cargoes liable to be washed overboard in Atlantic storms: and commoner still in the days of wooden ships, because steel hulls sink. Not all wreck reached the monks and the lay proprietor in the old days, or the Customs in more recent times. The feeling of getting something for nothing from the sea was a strong incentive in the hunt for wreck, and very naturally smaller prizes were kept by the finders—a spar or plank, a can of paint, a barrel of beef, tins of food, a sack of flour (which keeps dry in the middle), shawls or shirts; and the story goes that for years after the wreck of the *Friar Tuck** (see Appendix) prime China tea was retailed from home to home throughout Scilly and Cornwall. Men have lost their lives trying to get one more thing from a ship before she broke up, or venturing on the water in unfit weather searching for wreckage. Carpets, tobacco, clocks, tins of liver salts, have all been collected with equal enthusiasm, and in certain instances buried for some months until all was quiet again and the zeal of the authorities had died down. It was not considered immoral to push a grand piano off the deck of the *Minnehaha* (1910) and wait for it to float ashore with the next tide, for wrecking has a morality all its own: 'Finding's keepings', and out-wit the Customs officer if you can. But probably nothing of great value often escaped the authorities because of the difficulty of keeping it quiet, or disposing of it in such a small community; and there are recorded instances¹ of the most ingenious dodges made to avoid the eye of the Customs' officer—such as the man who dropped his hoard of tins into the sea attached to a buoy, intending presumably to retrieve them when the coast was clear—which came to nothing. And

1 Wreck Letter Books. MSS. St Mary's Custom House.

though it is true that a quantity of American dollar notes came ashore when the *Schiller** was wrecked; this was exceptional, and some of the finders had little idea of their value and destroyed them as useless and perhaps incriminating—though others, more knowing, bought them up and turned them to good account. Another reason for the declaration of wreck was legitimate salvage money, which was often good. When the *Castleford* was wrecked in 1887 on Crebawethan, eight men from Agnes brought eighteen cattlemen to land in dense fog and heavy seas, gave them clothes and lodging, and were eventually awarded £12. 11s. Bryher men were granted £500 for saving and lodging sixty-six passengers and four stewardesses from the *Minnehaha* (1910), taking them across to St Mary's, and for salving property and making repeated trips to and from the wreck with information for the captain and those on land. For the work they did, this sum is not excessive, especially in view of the fact that it was feared the ship might at any moment slip back into the water, or turn turtle. Some of the most profitable wrecks for the islanders were ships carrying live cattle, like the *Sussex*, 1885, the *Minnehaha*, 1910, and in particular the *Castleford*, 1887, where as much as £5 a head was paid. In the poverty of the nineteenth century in Scilly the possibility of such a windfall was exciting, and men risked their lives with terrified cattle in flooded holds to claim it. The burial of carcasses was essential too, and £1 a head was paid in 1885 for burying the bullocks from the *Sussex*, while the islanders would not bury those from the *Castleford* for less than 30s. When these had been in the water some time, this was a difficult and unpleasant job, and on one particular occasion after the wreck of the *Castleford*, six men with a boat took the whole day to bury a carcass—still for the regulation sum. There is an amusing instance of one man whose £1, received for burying a bullock from the *Sussex*, was later requested back when the Receiver of Wreck discovered that he had towed the carcass to land in the first place!

The occasion of wreck also brought other benefits to the inhabitants in the form of bargains from salvage auctions held in the islands, and varying types of unexpected employment. When *La Gauloise**¹ went ashore on

1 *La Gauloise* was a wooden barque, reg. ton. 332, and, early in 1888, on a voyage from Bordeaux to Porth Cawl, Glamorgan, carried a crew of 11 hands and a cargo of 437 tons of pit wood. At 12.45 a.m. on 15 January, they were under plain sail, heading N.N.E., with the wind S.E. by E., and saw Agnes Light bearing W.N.W. $\frac{1}{2}$ W. about 14 miles away. Then fog came down, and the breeze freshened and veered north-easterly, and at 1.45 the Master, Raoul Herand, told the mate to keep a good look-out for the new red light (Round Island), and for the Seven Stones; but nothing was seen until 2.10 a.m. when the mate went aloft on the foreyard, and saw Round Island Light to the N.W., and rocks on all sides. He ordered the helmsman to luff up, but the Master coming on deck gave orders to go about, and took the wheel himself. She missed stays, and when the Master ordered the fore- and mainyards to be backed, she drove to leewards and

Great Arthur in 1888, she carried 437 tons of pit props, nearly all of which were unloaded by islanders over the spring and summer when the weather was fit and the tides favourable. In the St Mary's 'Board's Letter Book' for 1881-1935 there is mention of sums paid to men for rowing out to visit and re-rummage the vessel—a matter of about 3 miles each way—which totalled £1. 16s., and represented a payment of 3s. per trip to each man. In the case of the derelict *Sophie*,*¹ it took six men three to four hours a day, for a week, to pump her out, and they earned 2s. 6d. a day. There was the interpreter's fee of £1. 1s. for the depositions of foreign survivors of wreck—although the Board of Trade with its usual taste for economy queried this payment over the wreck of the *Bernardo*,*² and instructed

went on to the rocks of Gt Artur. A boat was lowered and all hands got in and lay off some distance, fearing the mast would go over the side, but later some of the crew re-embarked. It was high tide at the time, and at low water she dried and was seen to have a rock through the bottom on the port side amidships, with her keel broken, and the garboard plank on the starboard side started off. She was in a dangerous position and the cargo could only be worked at certain states of the tide and in certain conditions of weather, but she remained there until the autumn when, with what was left of the cargo, she was sold to Mr Joseph Deuley of Penzance for £14. 10s.; and he had her burned to the water's edge to obtain the pit wood. Altogether the money raised on the sale of the wreck and cargo totalled £70. References: Deposition Book, MS. 1885-1900, St Mary's Custom House; Wreck Letter Book, MS. 1886-91, St Mary's Custom House; *Lloyd's List*.

1 The *Sophie* was a Norwegian barque of Fredrikstad, reg. ton. 533, which was found derelict by Mr J. Pender, on Tuesday, 15 December 1896. At 8.30 a.m., half flood, in clear weather with a fresh northerly wind and a heavy northerly sea, she was seen by him, dismasted and derelict, lying about 4 miles north of Shipman Head, Bryher. She was lying broadside on to the wind, and the seas were breaking right across her. Pender went out to her in a gig with nine men, and with four others managed to board her at 10.30 a.m. The steering gear was totally disabled, and proved dangerous, though possible, to mend, and in the meantime gigs from Tresco and St Martin's arrived. Two small sails were set on the bow to run her before the wind into New Grimsby Harbour, the crews of the gigs assisting. The steering was dangerous, one man was nearly flung overboard, and several thrown around, but at 12.30 p.m., when the *Sophie* was about 2½ miles from land, the *Lady of the Isles* (the mail steamer of the islands) arrived, and towed her to New Grimsby. The pumps were worked for four hours until they sucked dry, and she had to be pumped regularly until she could be floated over the bar on the next spring tide and beached. At 2 p.m. the Receiver of Wreck arrived, and put two ship's keepers on board to protect property (the crew's personal belongings: 7 lb. tobacco; 1½ gallons spirits; and 25 lb. unroasted coffee) one of whom was taken off the next day. It was subsequently discovered that the vessel had come from Swansea with coal, and had been abandoned in a sinking condition on 14 December, lat. 50 N., long. 6 W. All the crew had been picked up by the south-bound British steamer *Glenmore*, and landed in Gibraltar on 20 December. The vessel and cargo was later sold by private contract to T. A. Dorrien Smith, the Lord Proprietor of the Isles, for £250, and much of her timber was used for fencing the Abbey farm land. References: Deposition Book, MS. 1885-1900, St Mary's Custom House; Wreck Letter Book, MS. St Mary's Custom House; *Lloyd's List*.

2 The *Bernardo* was a wooden barque, reg. ton. 706, who left Alicante in ballast bound for Cardiff on 19 February 1888, with a crew of 12. At midnight on Saturday, 10 March, she encountered a gale, which by the early morning of Sunday the 11th had increased to a storm. At 2 a.m. her lower main and lower fore topsail carried away, and the upper fore topsail, which was

Geoffrey Owen, the Receiver of Wreck, to reduce it to 10s. 6d. in future. Reporting a wreck from an off-island in the latter part of the nineteenth century brought in 5s. per man. And there were the charges made by the islanders to the appropriate authorities for the board and lodging of survivors of wreck, which in 1799 when the *Colossus** (see Appendix) was wrecked, came to 2s. a day. The total charges for the keep of these men over a period of about 40 days came to £44, for Tresco, and £38. 16s. for Bryher—a claim which was, initially at any rate, refused by the Commandant of the Isles, Major Bowen, and by Captain Murray of the *Colossus*.

The amount and value of the wreck which came to Scilly of course depended on the prosperity or otherwise of trade to the northern ports of France, to Scandinavia, Russia and, above all, England. Little is known of the perhaps considerable shipping along the French Atlantic coast before the twelfth century, but later, with the growth of the wine trade from Bordeaux, and the export of tin, lead, leather, iron, and especially wool, the mouth of the English Channel was more extensively used, and the Scillies constituted an ever-increasing danger to commerce. Then came the discoveries of Columbus and Raleigh, and with the freeing of colonial commerce after the Long Parliament's Navigation Act, the Isles of Scilly assumed their long-lasting notoriety as the worst area of its size for wrecks around the coasts of Britain, in the centre of one of the greatest shipping arteries of the world. The foundation of the great trading days of England was laid, and a large percentage of this trade had to pass Scilly. Down the Channel came gunpowder, hard wares, woollen manufactures of all kinds, tobacco, spirits, leather goods, fish. Up it came drugs, ivory, wine, sugar, dragon's blood, pomegranates, lemons, oranges, gold, diamonds, silk, tea, pepper, coral, cotton, fruits, lambskins, olives, anchovies, aniseed, gums,

furled, was blown from the yards. A new inner jib, set to pay her head off, blew away carrying the stay with it. They then set a fore sail, but it also blew away, and the ship became unmanageable. Later, still blowing a storm, squally and hazy, the wind veered W.N.W. with a heavy sea from the same direction, and 7 a.m. found the ship blowing before the wind stern first on to Annet. They set a reefed upper topsail to try and bring her under control, but it had no effect, so was lowered and subsequently blew away, and the crew being disabled and exhausted were unable to drop anchors. Just before she struck, all hands got into the ship's boat and lowered away, but the stern tackle became unhooked, and the boat, hanging by the bow tackle, capsized and was knocked around and around in the seas, throwing all the crew into the water. Only the captain, Andrea Dapelo, escaped drowning by climbing up the bow tackle to the ship's deck, undressing, and swimming to a near-by rock, known as Old Woman's House Rock, where he was found soon afterwards by a gig from Agnes. He was taken to the house of Mr Obadiah Hicks who clothed and fed him, and landed him on St Mary's at 1.45 that afternoon. On the following day when two gigs went down to Annet, the men could walk into her over the mast. References: Deposition Book, MS. 1885-1900, St Mary's Custom House; Wreck Letter Book, MS. 1886-91, St Mary's Custom House; *Lloyd's List*.

brimstone, chip hats, beads, oils, soap, bugles, cochineal, almonds, indigo....¹

All these delights and more passed Scilly in a vast fleet of merchant vessels, and the risk implicit in the very nature of the sailing ship ensured that many ended their days there. More gear was subjected to the stress of weather than in steamships; a sail can carry away sooner than an engine fail, and tacking or wearing takes time—too much time when up against a lee shore, or surrounded by rocks. The *Falkland**² is but one example of a sailing ship whose wreck was directly due to her lack of manoeuvrability.

The reasons for wrecks in Scilly are varied. From Heath's³ description of life in the Islands, it is obvious that the islanders carried on a considerable trade with home-coming ships from the West Indies or other foreign parts; these ships probably put in intentionally for supplies, and perhaps a change of company, for the Inns of Scilly were well known. Others would make for Scilly to pick up a Channel Pilot, or to receive orders from the Lloyd's Signal Station on the Garrison at St Mary's. Both Heath⁴ and Troutbeck⁵ mention instances of 100 coasters lying in St Mary's Pool,

¹ These are some of the goods listed in Sir Charles Whitworth's *State of Trade* (1776), pp. xvii ff.

² The *Falkland* was a four-masted steel barque, reg. ton. 2676, and she was classed 100 A 1 at Lloyd's. On 5 February, she left Tacoma with 4500 tons of wheat, bound for Falmouth for orders. She had 28 hands, and 2 passengers, and on Saturday 22 June, found herself off the mouth of the Channel in the most severe southerly gale experienced there since the winter. There was a heavy south-westerly sea, and the visibility, bad in general, was frequently further diminished by squalls with thick fine rain. At 5 p.m. she bore up for the Scillies, but came in too close. She sighted the Bishop between squalls, tried to stay, but missed. She then tried to wear, but was too near the Bishop, and so tried to stay again, but again she missed. By this time the vessel had stern way, drifted on to the Bishop which she struck with her port beam, and began to heel over and fill—the marks made by the yards striking the rock may still be seen. The starboard boat was held by the cant of the vessel, but the port boat was launched, and the captain, his wife and two-month-old son, and 20 men got away. The captain later returned to the ship to fetch his sextant and could not be got off again. Soon after, the ship heeled over on her beam ends and sank in deep water, taking the captain and the remainder of the crew with her, except for the cabin boy and the A.B. who were picked up by the ship's boat. The Bishop gun had been fired twice for the lifeboat, and the Agnes and St Mary's boats went out. The Agnes men reached the scene of the wreck first, found the ship's boat, and after transferring about 10 men, took her in tow to St Mary's. Mr William Cameron, an inhabitant of St Mary's, now aged 90, remembers how it took himself and 14 others two hours to reach the Bishop in the *Elsie*, using a loose-footed lugsail and mizzen, and reckons it must have been blowing 75 m.p.h. They went round the Bishop once, and saw nothing, but the second time they caught sight of the light of the ship's boat, already in tow. They searched for the remainder of the crew: Captain Gracie, Chief Mate Bateson, Steward Anderson, and three seamen, but found no one. The mate's body was later found on a hen-coop in Hell Bay, Bryher. References: *Lloyd's Register*, 1900; *Lloyd's Weekly Shipping Index*; Deposition Book, MS. 1901-27, St Mary's Custom House.

³ R. Heath, *op. cit.* p. 119.

⁴ R. Heath, *op. cit.* p. 71.

⁵ J. Troutbeck, *A Survey of the Ancient and Present State of the Scilly Islands* (Sherborne, 1795), p. 51.

taking shelter from an east wind, until a fair wind could take them up the Bristol or English Channels. Of these intentional visitors, the rocks of Scilly, combined with adverse weather, mismanagement, or failure of gear, took their toll. But other ships fell in with Scilly by accident—driven by gales, like the *Serica** (see Appendix) confused by the complicated set of the tides in these waters, like *La Gauloise**, misled by fog and bad visibility, like the *Maipu** and the *River Lune**.

The wreck of these two ships on the same night within an hour of each other was a terrible tribute to the powers of fog. Both iron barques, they were wrecked in almost exactly the same way, though at different ends of the archipelago. The *Maipu*, registered tonnage 593, with a crew of 17, was on a course from Iquique to Hamburg with a cargo of saltpetre. On Sunday, 27 July 1879, at noon, no observations could be taken, and a position of lat. $50^{\circ} 35' 0''$ N., long. $7^{\circ} 43'$ W. was estimated by dead reckoning. Visibility gradually decreased, and by evening a dense fog prevailed with a moderate west wind and a smooth sea. At 11 p.m. the *Maipu* was steering south on the starboard tack, having been taking soundings, when the Captain, Thomas Wheeler, thought he heard surf, and sent the second mate forward to listen. He ran to the bow, but could see nothing, and the wind in the foresail prevented him from hearing distinctly. The

1 The holding ground at Scilly is good, but the various anchorages are exposed, so while there are relatively few ships who have dragged their anchors in Scilly, very many have come to grief through failure of ground tackle. The *Fane Owen* was one of the former. She was a wooden schooner, wrecked on 3 March 1889. On February 23 she came into St Mary's Roads, from Aberdeen bound for Devonport, with a crew of four and a cargo of slates. She remained there until 2 March, when at 5 p.m. she sought new anchorage in New Grimsby Channel. The next day the wind was squally, blowing a fresh gale from the S.W. and at 9 p.m. with the tide 2 hours ebb the *Fane Owen* was lying with her port anchor out. Then in a heavy squall her sheer broke and she dragged her anchor and drifted on to Queen's Ledge. The crew left in the ship's boat and landed on Tresco at 11.15 p.m. saving only a few clothes, for the ship fell on her beam ends to starboard and filled on the flood tide.

The *Salmon*, built in Quebec, 1859, first rigged as a brigantine and then changed to a schooner, was wrecked on 15 January 1871. She came in to Scilly on the 12th with the 'crew refractory' (*Lloyd's List*) from London for East London with a general cargo. In the early part of the night of the 15th it blew a very heavy gale from the S.W. with torrents of rain, and the *Salmon* parted both her cables and drove ashore on the east part of the Mare Ledges. On the 16th, a Monday, the steamer *Earl of Arran* went to tow her off, but failed after several attempts, and the vessel became a total wreck.

The *Rosa Tacchini* was a barque from Buenos Aires bound for Antwerp, with a cargo of hides, tallow and wool, and came into Scilly on the afternoon of Friday, 22 November 1872, and anchored in St Mary's Roads. Later in the day it blew a very heavy gale from the S.S.W. and early on Saturday afternoon the *Rosa Tacchini* parted one of her cables and drove on to Paper Ledges where she struck twice. At 10 p.m. she was seen to be getting into a most dangerous position, so three masts were cut away in an attempt to enable her to ride out the gale, but she filled soon afterwards, and hopes of saving her proved unfounded. References: *The Cornish Weekly News and Advertiser*, Saturday, 30 November 1872.

Captain, still unsure of his position, had just put the helm up to wear ship when an able seaman reported land a ship's length away on the lee bow. The helm was put hard down, and orders given to haul out the spanker and set the gaff topsail, but she struck forwards, and became fast on the rocks of Hell Bay at the north end of Bryher. Boats were launched, and the mate took a line to the shore, by means of which some of the crew got to land, while the rest remained in a boat near the *Maipu* until morning. Then they saved the sails and what personal belongings they could, but the ship was seen to be a total wreck, with only her poop above water, and all her cargo washed away.

The *River Lune* was bound for Ardrossan, Scotland, from L'Orient, in ballast, with a crew of 20. On Sunday, 27 July, they got good observations at noon and at 4 p.m. with what the Captain later deduced must have been a faulty chronometer, so at 10 p.m. that night, when the fog had come in thick, he was certain of a position 10–15 miles west of the Bishop, and omitted to take soundings. The course being steered was north-west, with the ship on the port tack, when the lookout reported rocks on the port and starboard bows. The helm was put down, but she struck on the port bow as she was coming round, and within ten minutes was full of water aft and heeling fast. All the crew took to the boats and rowed around keeping the ship in sight, until in the morning a fisherman saw them, and took them to Agnes, where they learned that they had struck Isinvrack Rock in Muncoy Neck, to the south-west of Agnes.

A further cause of wreck in the latter half of the seventeenth century and the first half of the eighteenth was pointed out by Heath¹ in 1750. He quotes Dr Halley who had noticed that in the contemporary charts and books of navigation, the Lizard and the Isles of Scilly are set, east and west of each other, north of 50° and sometimes as much as 50° 10', whereas their true position is on lat. 49° 55'. At the time when the charts were made, this error was counteracted by an easterly variation; but when the variation became westerly in 1657, it suddenly became more significant. No new charts were issued, and so ships entering the channel, missing observations for a day or two and forgetting to allow for variation, would not only fall north of their estimated position and risk running up the Bristol Channel or falling in with the rocks of Scilly, but would have the latter risk enormously increased if they reckoned Scilly in or above 50° lat.

Another reason, and one which persists until the present day, for ships finding themselves north of their estimated position, is the Rennell Current. This current was named after a Major Rennell who discussed it in 1793,

1 R. Heath, *op. cit.* p. 28.

but it was known as early as 1673. It sets round the Bay of Biscay, and then runs north-west across the entrance of the Channel and after a succession of westerly gales may reach the velocity of one knot. The potential danger of such a current is obvious, and the following few examples of more recent wrecks, all occurring in fog, are direct evidence of its effect on shipping. When the *Schiller** was wrecked in 1875, she had plotted a course which should have taken her 8 miles south of the Bishop. On 8 June 1885, the *Earl of Lonsdale* was totally wrecked to the north-west of Agnes. She was steaming full speed ahead, the master being sure he was 'at least 10 miles south of the Bishop'.¹ The captain of the *Indipendenza*,*² wrecked on 24 September 1881, thought he was 15 miles south-west of Scilly. The *Minnehaha*, wrecked on Scilly Rock on 10 April 1910, should have passed by dead reckoning 'At least 7 miles South of Bishop Light'. The *Susanna*, on 14 August 1913, altered her course a point south 'to go well clear of the Scilly Isles', and struck on the outlying rocks near Annet. The *Isabo* struck Scilly Rock at full speed on 27 October 1937, when she was thought to be '13 miles South of the Bishop'.

It is impossible to get a definite tally of the distribution of wrecks around Scilly, for even the extant records for the last 80 years are by no means complete, and many an old Scillonian will tell one of a wreck unmentioned in the deposition books of St Mary's Custom House. However, an average taken from the recorded wrecks from 1878 to the present day, shows a concentration of as much as one-third among the rocks west of and including Agnes. The remaining two-thirds are spread out over the rest of the

1 All quotations here are taken from the Deposition Books, MSS., at St Mary's Custom House.

2 The *Indipendenza* was a wooden barque of Genoa, reg. ton. 795, who left Bristol on 20 September 1881 in first-class condition bound for Rotterdam, with a cargo of 1200 tons of hides, horns and guano, and a crew of 14 including a Channel Pilot.

On Saturday 24 September at 3 p.m., on the flood tide, dense fog prevailed with a moderate west wind and a heavy swell from the S.W., and the *Indipendenza* was steering S.S.E. under plain sail. No observations had been taken since leaving Lundy because of thick weather, but the Pilot, William Ouzman, thought they were 15 miles S.W. of Scilly. At 2 o'clock soundings were taken, but they found no bottom; at 2.30, 48 fathoms were reported, then 42 fathoms. A little later the lookout reported breakers ahead, and the Master ordered the vessel to be kept away, but five minutes later she struck heavily four times. However, she came off and was hauled by the wind—but she struck again on the Crim where she remained about 4 minutes with 6 feet of water in her. She came off again, and bore up for St Mary's Roads, but when the pumps were sounded she was found to be leaking badly, and the crew abandoned ship. Finding she did not sink, they returned again, and set a course E.N.E., but either because the crew were frightened (William Ouzman's deposition) or because she was unmanageable (the Master, Filippo Caffarena's deposition), or both, they abandoned her after 20 minutes and followed her into St Mary's where she wrecked herself totally on the Barrel of Butter. The mast and a large quantity of materials were salvaged from the vessel, but owing to her position the cargo was difficult to work, and only about 15 tons were got away. Though for some time after, the bay was thick with drifting horns. References: Deposition Book, 1878-84, MS. St Mary's Custom House; *Lloyd's List*.

archipelago, in fairly even density except for a marked cluster on the Seven Stones. Of individual sinners, the Seven Stones, with a total of fifteen wrecks, including the *Lofaro** (see Appendix) and the *Primos** (see Appendix) are the worst—although strictly speaking they lie outside the bounds of Scilly, some 7 miles to the north-east. Next comes the Crim Rocks—an ugly collection of half-tide ledges lying approximately 1 mile north-north-east of the Bishop Rock, with ten to their credit. These form the most northerly and westerly outpost of the western group, slightly separated from the main gathering, which on a calm day lie, scattering out from Annet in patient deceptive peace—a blue stretch of water terrifyingly broken by dormant granite fangs, the tide channels casually marked by drifting skeins of spent foam. But such days are rare, and more often the rocks resound to the continuous stir and surge of the wind and seas.

The west is ill-famed for the magnitude as well as the multitude of its shipwrecks, for some of Britain's most spectacular shipping disasters, naval, civil, and commercial have occurred here. In the early evening of 22 October 1707, Sir Cloudesley Shovell's whole fleet found itself among these rocks, in a gale of wind and bad visibility, and over 2000 men lost their lives. The flagship herself, the *Association*, was wrecked on or near the Gilstone Ledges, with the *Eagle*, *Romney*, and the fireships *Phoenix* and *Firebrand* foundering nearby, and it was a merciful Providence which saved many of the other ships that night. An extract from the log¹ of the *Isabella*, the only yacht in Sir Cloudesley Shovell's Mediterranean squadron in 1706–7, is a dramatic record of the narrowness of one escape. At 8 o'clock that evening they saw the Agnes light, and '...took it to be one of our Admiral's lights. We steered after it till we perceived the rocks on both sides of us, we being so very near to them we immediately wore our yacht and layed our head to the Westward crowding all the sail we could to weather the Rocks under our lee. We filled full and full and by God's mercy we got clear of them all...'.

On 4 January 1841, the passenger steamer *Thames** (see Appendix) with 66 passengers and crew, was totally wrecked on the Brow of the Ponds, south-west of Annet, and only four were saved. The wreck of the *Schiller** on the Retarrier Ledges on 7 May 1875, was one of the greatest and most ironic tragedies of civil shipping, caused primarily by the disastrous combination of the Rennell Current with fog. With 372 passengers and crew on board, she neared Scilly at half speed, but at 10 p.m. she passed inside the Bishop Rock Lighthouse without seeing its light or hearing its gun, struck the ledges and began to break up. Signals of distress were made by cannon, and were heard by the islanders, but were at first taken to be her arrival

1 Lieut.'s logs. MS. ADM/L/J/119a, National Maritime Museum.

signals—for the regular distress signals were frequently misused in this way by ships passing Scilly—and a message to that effect was passed to the North German Lloyd. However, on hearing more guns, a small gig with six men set out with other Agnes boats. They searched for two hours without finding anything, and were about to give up, thinking it had been yet another false alarm, when they discovered the *Schiller* breaking up on the Retarrier Reef. They only managed to save 41 lives. Finally, there was the 'largest fore and aft schooner the world had ever seen'¹ the *Thomas W. Lawson** lost in Scilly on 14 December 1907. She was a seven-masted steel schooner, 5128 tons gross with a cargo of 60,000 barrels of petroleum and oil, and a crew of 17, who got into difficulties inside the Bishop Rock, and had to drop anchor. By a most unfortunate coincidence both the St Mary's and the Agnes lifeboats were forced to leave her in the night, and in terrific seas, with the gale gusting over 90 m.p.h., she dragged her anchors or parted her cables, and broke her back on Annet. Her crew had no time to fire distress signals, and in the morning the lifeboat crews dipped their oars in a sea of oil and drifting wreckage, and picked up three men.

To-day in Scilly there are few wrecks, but we have a signally vivid reminder of the old days in the great collection of relics from ships wrecked in Scilly, beginning with the *Colossus* in 1798, to the *Turquoise*, a collier, torpedoed in 1915. It was started about a hundred years ago by Augustus Smith in Tresco Abbey Gardens, and carried on by his nephew and great nephew. It consists principally of fiddleheads, figureheads in human and animal form, nameboards and sternboards, and includes a wide range of style and type of decoration, echoing the large diversity of rigs and nationalities. Some of the examples are thought to be unique—at any rate in this country—and the collection may be taken as representative of the growth of the scrolled fiddlehead side by side with the final free standing figurehead. Augustus collected them from all over the islands, finding them in a more or less dilapidated state exposed to all the weather in gardens or on beaches, or lying ivy-covered under hedges. In a building he designed for these storm-tossed veterans of the days of sail and early steam, called 'Valhalla', a pebbled ceiling and walls adorned with tropical sea-shells represents the bottom of the sea, and the figureheads themselves are mounted on rough-cut granite boulders. The names of those ships whose relics are to be found in 'Valhalla' have been starred in this article, though these do not represent its full extent. It is fortunate that Augustus had the foresight to save them from decay in an age when few people had any idea

¹ *Cornish Magazine* (1959), Vol. 1, p. 314.

that their use was about to be abandoned. This natural decline of the figurehead was hastened by the rise of the steam age, for although figureheads were found on steam as well as sailing ships, the flowing lines of the wooden carvings are not easily reconciled with the blunter bows of the steamship, nor their need for individual attention and skilled craftsmanship with the demands of the age of mass production. The collection is now owned by Lieut.-Commander T. Dorrien Smith, who decided in 1956 to repair these relics, and to put on view many not previously exhibited. Some of the figureheads were in a very bad condition, and in a few years' time would have been past repair. The Historic Buildings Council is assisting in the reparation, which is being carried out by a team of specialists directed by Mr H. R. Allen, under the guidance of Mr G. P. B. Naish of the National Maritime Museum at Greenwich. The Society for Nautical Research has issued an appeal for money with which to complete the work of restoration. It is a very highly skilled job, entailing the gradual stripping and recording of the various coats of paint acquired by the figureheads through the years, and their eventual painting in the original colours. Any damage to the wood is made good, impaired features are deftly remoulded from old photographs and records and, before painting, the whole figurehead is treated with a special preparation to prevent rot. The original building has been extended to allow for effective display of the collection which is one of a rare interest and beauty, forming as it does a very inclusive survey of an unusual subject, and having the additional merit of exhibiting the relics near the scene of their final calamity.

APPENDIX: SOME NOTABLE WRECKS

H.M.S. *Colossus*

H.M.S. *Colossus* was a ship who, like many another, found danger in Scilly when she looked for safety, and after coming to harbour was blown from her moorings and wrecked.

In 1796 George Murray, a friend of Nelson, was appointed her captain, and joined Sir John Jervis in the Mediterranean. She was a man-of-war, 74 guns, and on 14 February 1797, took part in the Battle of Cape St Vincent off Portugal. There she was ordered to lead the van, but her fore-topsail yard carried away, and she became only serviceable on one tack, and so fell too much to leeward to be of much value that day. She remained in the Mediterranean off Cadiz and Tagus the rest of that year, until she was detailed to escort ships to Naples, and finally detached from there by Nelson to take part in the blockade of Malta. She had been in service for some time,

and her increasingly bad condition, which she shared with much of the Mediterranean fleet, was aggravated by her being gradually stripped of gear to aid other distressed ships, and at the close of 1798 Captain Murray was sent home to Lord Spencer to obtain a better ship. She had a convoy from Lisbon in charge, and was the ship chosen to carry home Sir William Hamilton's best pictures and the gems of his collection of Etruscan vases on his leaving Italy. There was also 'scarcely an officer in Lord Nelson's fleet but had put on board some presents for their friends, which had been taken on board of the French Fleet',¹ and in addition to her normal crew she was carrying many sick and wounded from the Battle of the Nile, though she herself had not taken part in it.

On Friday, 7 December 1798, the *Colossus* came into St Mary's Roads for harbour as the wind was strong north-east, and the *Colossus* was unseaworthy and badly provisioned. She had with her eight vessels from Lisbon, the rest of the convoy having gone up two days earlier to Ireland and the Northern ports. On 9 December the wind was strong from the E.S.E. and S.E., and increased considerably on the 10th. It blew strongly all that day, but all was well until 4 p.m. when the cable parted, and the small bow anchor had to be let go. Then the sheet anchor was dropped, and the yards and topmasts struck in preparation for riding out the gale. However, at about 5.30 p.m. the small bower anchor dragged, and the vessel struck the ground, and though at that time she did not take much damage, when the wind drew more southerly at 8 p.m. she was blown on to Southern Wells—a shoal of rocks to the south of Samson, 18–24 ft. under water. The rest of the convoy were riding safely, 'notwithstanding the wind had arisen to a perfect tempest'.² At midnight the rudder carried away, distress signals were repeatedly made, and by daybreak next morning the water was up to the cills of the upper deck ports, and she was still rolling heavily in terrific seas. At about 8 a.m. the islanders came to their assistance, taking the sick and wounded off first, and before 3.0 p.m. the captain saw the last man out of the ship, with only one man lost—the Quartermaster, Richard King, who fell overboard while taking soundings. In a subsequent court-martial, Captain Murray, his officers and men, were fully acquitted, the cause of the disaster being put down to the rotten state of the best bower cable, although it had never been used.

Very little was ever salvaged from the *Colossus*. She fell on her beam ends the following night, and for two days after the wreck the weather continued so bad that it was impossible to get near her. A rumour was circulated that she had a quantity of specie on board but this was unfounded as Captain Murray had refused a bill of lading to the Merchants of Lisbon who had been intending to ship in her. 'Many useful pieces of masts and spars,

copper, iron etc.,³ and an anchor of 72 cwt. were brought off her, with various armaments, and among the salvaged cases was one containing the embalmed body of Admiral Lord Shulldham who had died at Lisbon, and had been shipped home as cargo to avoid arousing the sailors' superstitious fears. A letter, which if it were not so amusing would be tragic, was written on the subject by Sir William Hamilton to his nephew Charles Greville to whom the Hamilton collection had been consigned: 'My Phylosophy has been put to Trial by the loss of the *Colossus*. You give me but little hopes, but I have learnt that the body insolvent of Admiral Shulldham has been saved from the wreck. . . damn his body, it can be of no use but to the worms, but my Collection would have given information to the most learned.'⁴ His treasure is supposed to lie to this day amongst the rocks of Southern Wells.

References

- (1) *Morning Herald*, Wednesday, 19 December 1798.
- (2) *The Naval Chronicle*, Vol. 1.
- (3) Admiralty Letters to Navy Board. MS. ADM/A 2912. National Maritime Museum.
- (4) Letter of 22 March 1799. Greville and Hamilton MSS. British Museum 42069-82 Additional.

Thames

The S.S. *Thames*, 500 tons, belonging to the City of Dublin Steam Packet Co., was on her usual trip from Dublin to London early in 1841, when she was wrecked in Scilly with terrible loss of life. She carried approximately 25 crew, 30 young recruits, and about 11 cabin passengers, including 5 women. Her Master, James Grey, had been married three weeks.

Saturday, 2 January, had been fine in Scilly, but in the night it came on to blow a gale which continued throughout Sunday with frequent heavy squalls of rain and snow, with lightning, and '...the sea was agitated in a most furious manner—white with boiling foam, or turbid with weed and slime whirled from the borders of surrounding coasts'.¹ The *Thames* left Dublin on Saturday, and all went well till the Agnes light was sighted, early on Monday morning. This signal should have been a full glare once a minute, but two women later testified that the light had appeared to be fixed for $\frac{1}{4}$ hour as they watched it, and the Master mistook it for the steady light of the Longships. He set his course accordingly, but soon after 4 o'clock a.m. a tremendous sea broke over the ship, flooding her and putting out the fires in the engine room, and immediately afterwards rocks were seen to leeward. The Master ordered the main- and foresails, and fore staysail, to be set in an attempt to weather them, but the vessel was waterlogged and unmanageable and she fell broadside on the Brow of the Ponds, and began to break up.

The passengers came on deck, and one man undressed to take a line to the shore, but the tide and heavy sea made this impossible, and he did not attempt it. Seven recruits got into the starboard boat, but one jumped short as the boat was passing under the vessel's stern, and was drowned, and soon afterwards the boat and its occupants were swamped. At 6 o'clock, blue lights were shown, but the islanders thought it was lightning, and it was not till 7.30 a.m. that the *Thames* was seen lying on the rocks flying her distress signal, with seas breaking right over her. Her bows were under water and her stern high up on the ledge, and her quarter deck crowded with people. Ten men rushed to Periglis, launched the *Thomas*, the only gig immediately available for service, and reached the *Thames* after an hour's rowing in very dangerous conditions. They veered on to the weather quarter of the ship, and when within an oar's length of her they got a line on board and two stewardesses and one woman passenger were hauled into the gig. But no more could be taken in, and as it was the crew had to bale continually with hats and any receptacle they could lay hold of. They then cut the line and got into the lee of Goreggan, where the women were transferred to the *Active*, a pilot boat, 1st class, who had been lying off the rock with four reefs in her main sail. Two other Agnes boats, the *Bee*, 11 crew, and the *Briton*, 8 crew, had got as far as Goreggan, but the wind then shifted easterly and increased, and it became impossible for any boat to get back to the wreck. So it was that in sight of those who were trying to save them, in boats not half a mile distant, all the people remaining on the *Thames* were drowned or killed when a big sea broke over her, smashing the mast, and breaking her up finally.

There is but one relieving factor in the whole of this dreadful situation, and that is how Edward Kearons, one of the crew who had joined the ship the day she left Dublin, was saved. With four others he had got on to a raft of part of the quarter deck and drifted towards Rosevear, but was the only one to reach the rock. He climbed up it, and, looking round for his companions, saw a cask of porter, from which he very sensibly took a draught. He threw the rest away, filled the cask with wild grass, wedged it in a hollow place between two rocks, and slept there till next day when he was found by further search parties. So he became the fourth saved out of approximately 66 lives.

It is not certain how it was that the Agnes light appeared fixed to watchers from the *Thames* that night, but the Rev. Woodley puts forward the explanation that the snow showers could have reflected the beams, and made them appear as a continuous, though faint, illumination all round the lantern. He also noted severe criticisms on the rescue equipment of the *Thames* (2 boats), and her signalling apparatus and on the lack of

adequate sea-going boats available for immediate rescue operations from the islands.

Reference

(1) The Rev. George Woodley, *op. cit.*

Friar Tuck

From all over the country came reports of terrible devastation both inland and at sea, after a hurricane had burst in the early morning of 2 December 1863. Chimneys had been blown down; roofs blown off; trains were stopped; three vessels were wrecked in the London docks alone, and the *Friar Tuck* was only one of five ships totally wrecked in the Isles of Scilly that day.

During the last days of November, a fleet of above 500 sail had put into St Mary's Roads, wind-bound. Among these was the *Friar Tuck*, a tea-clipper of 662 tons from Foo-chow-foo, who arrived on Friday 27 November with her fore and mizzen masts sprung, and the carpenter dead on board. He was buried in St Mary's on the Saturday.

On the following Wednesday, the glassy calm prevailing for two to three hours in the early morning was suddenly shattered by a gale 'such as the oldest inhabitant never remembered to have seen before',¹ which burst furiously at 5 a.m. from the N.N.W. A dramatic account from a newspaper tells how in a very short space of time, bricks, tiles, slates, glass and window sashes were flying in every direction, with the water in the sound 'one sheet of foam'.² Soon a dark shape was seen driving across it, which when daylight broke, was found to be the *Friar Tuck*, who had parted her cables and been driven on shore at Newford Island. Her masts were cut away soon after she struck, and she remained with the sea beating over her, and filling with water.

The Coast Guard, under the command of Lieut. Hire, R.N., and assisted by the islanders, used rocket apparatus to save the 22 crew. The line reached the ship at the first discharge, and all the men were got off except for two crew and two customs officers who were brought away in heavy surf by Mr W. Thomas in his boat. Salvage operations were started that day when the weather moderated, and the next day the Master's effects and a large quantity of sails, hawsers, and stores were salvaged. Three shiploads of dry and damaged tea were eventually sent to London.

It was a difficult time for those in authority, but the situation must have been pure joy for the less law-abiding among the islanders who were thus presented on their doorstep with such a glorious opportunity for wrecking. Newford Island is joined to the main island of St Mary's at low water,

lying off the harbour about half a mile from the town. The laconic entries in the Board Letter Book (1858-81) are revealing: The Receiver of Wreck, Mr A. R. Coll, has to send to Penzance for three or four trustworthy officers and glutmen; there is a notice on seizure of illegal stores of tea, and a query to the Collector at Falmouth about the possibility of identifying tea from the *Friar Tuck*. (The answer is in the affirmative.) The Receiver of Wreck is told to be careful to prevent tea from the ship being taken away and passed into consumption, and an example is given of tea which had been under water for 10 days and thought to be worthless, which was then dried in the kilns in London and sold in Bond for 11 $\frac{3}{4}$ d. a lb. It is not hard to imagine the night expeditions to the ship, or the look of irreproachable innocence of those who faced a suspicious Customs officer in front of the house, with a garden full of hastily buried chests at the back. For although tea spoils badly in the sea, there remains a centre of dry tea in those chests which have not been submerged for too long; and even saturated tea may, when dried and mixed with ordinary tea, be passed off as an acceptable drink. It is said that there are still houses in Scilly where *Friar Tuck* tea is drunk on special occasions.

References

- (1) *Cornish Weekly News and Advertiser*, 5 December 1863.
- (2) *Ibid.* *Royal Cornwall Gazette*, 11 December 1863; *Cornish Telegraph*, 9 December 1863; *Lloyd's List*; *The Times*, 4 December 1863; Board Letter Book, 1858-1881, MS. St Mary's Custom House.

Primos

The *Primos* was a Spanish barque, 406 tons, bound for Greenock from Havana with sugar, with a Captain aged 26, and none of her crew over 34. She had lain at Falmouth for 20 days waiting for orders, and on the morning of Thursday, 22 June 1871, the Captain refusing to take a pilot, had set out at 7.30 a.m. At 4.0 a.m. on the following Saturday the weather was hazy with a fresh breeze blowing from the N.N.E., and the *Primos* was on a course S.E. She was carrying royals and running at about 7 knots, when she struck the South stone of the Seven Stones with her lee bow, and sank in twelve minutes. An Italian seaman, Vincenzo de Felice, had been at the wheel until a few minutes before, and when the accident occurred it was the mate's watch on deck. According to Vincenzo, the only survivor, a scene of confusion followed the initial shock. The crew immediately launched a boat, but no painter was made fast and she went adrift. They had no time to get the large boat away, and although the Captain and four men managed to get into the Captain's gig, launched from the main hatch, she capsized as the barque went down, and the men were left clinging to her keel. Vincenzo himself jumped with the rest of the crew, undressed in the water,

and swam around till he came across a hen-coop. He clung on to this, but it turned over and over with him, and as soon as he could, he left the hen-coop in favour of the figurehead which he saw floating by. 'He felt very bad, and thought he was dying.'¹ He had stayed on the figurehead about an hour, when he happened to raise his head and saw the first boat which had gone adrift floating close to him. He swam towards her, climbed in, and pulled up one of the bottom boards to try and paddle to a man in the water near him whom he knew to be unable to swim, but at that moment the wind drifted him quickly away, and the last he saw of the crew were five of them lying across the keel of the capsized boat, and the others clinging to pieces of wreckage. He baled the water out of the boat with his hands as best he could, and at 10.30 a.m. found himself drifting into English Island Neck—a small channel between St Martin's and Nor Nor—where he was seen by some men of St Martin's who launched a boat and picked him up. He was crying out: 'Save! Save!' and was utterly exhausted. He was given some dry clothes, and after landing he was taken up to Mr John Nance, where he was given some warm coffee and put to bed. Later he recovered enough to be able to walk and was put in charge of Mr D. J. Buxton, the local agent of the Shipwrecked Mariners' Association—but nothing more was heard of the rest of the crew. The figurehead which was partly instrumental in saving his life later drifted to St Martin's and is now in 'Valhalla', while the *Primos* became a total wreck. Her topgallant sail was seen above water from Telegraph Tower, St Mary's, on the following Sunday, and also by Captain Stephen Gibson, who with his father owned the vessel, and who passed the Seven Stones soon afterwards on his voyage from Cardiff to Scilly. On Monday some boats went out to the *Primos*, but could do nothing, and in the next week there were days of very heavy seas around the islands which probably broke her up.

References

- (1) *Cornish Telegraph*, 28 June 1871; *Lloyd's List*; *Cornish Telegraph*, 5 July 1871.

Serica

The *Serica* was a steel screw steamer, built in Sunderland in 1888, registered tonnage 1736, and rigged as a fore and aft schooner. On her last voyage she left Cardiff on 16 November 1893, bound for Port Said with a crew of 25, and a cargo of 36,000 tons of coal.

All went well till she was 20 miles W.N.W. of Hartland Point on Friday, 17 November, when the weather became thick and rainy with a moderate gale and heavy seas from the W.N.W. At noon on Friday the tarpaulins over the forehatch were washed off and secured again, but by 11.30 p.m.

the Captain thought it no longer prudent to run, and rounded her head to wind. By Saturday morning it was blowing a hurricane. Tarpaulins over nos. 3 and 4 hatches had been washed off twice, and though secured with ropes were still leaking, and at 11 a.m. a sea was shipped which burst the cabin doors and gutted the main cabin. Stern pumps were kept going continually, but this was not of much avail against the terrific seas, one of which carried away her port boats, part of the lower bridge, and everything movable from the bridge aft; while another smashed the starboard boats, carried away part of the upper bridge, and swept off all the movables from the starboard side. About this time, the Master, Sydney William Smith, was washed overboard twice, and miraculously washed back again both times—but he was unconscious, and the 1st mate, John Parker, took over.

At 5 p.m. they sighted Agnes light bearing S.S.W., five or six miles away, and came in to land to seek shelter. During the night the pumps became choked so that water could not be got out of the hold, and at 4 or 5 a.m. on Sunday morning such a heavy sea filled the ship from the bridge aft, that the Mate thought she was going down and prepared to run her aground. But she righted, and with a heavy list limped safely into the Roads. W. Hiscox, the Receiver of Wreck at St Mary's, writing to the District Collector at Falmouth on 21 November says: '... nothing whatever was left standing in the cabin, the bulkheads were smashed in, and the very floor torn up. The only wonder is that the vessel kept afloat.'¹

This, however, is not the end of the story, for on 24 November, at low water, leaving St Mary's Roads 'fairly well found'² in fine clear weather, she struck an uncharted rock in St Mary's Sound and was run ashore near the Woolpack Beacon to prevent her foundering. She was abandoned almost immediately on striking the rocks as it was feared her boilers might explode, and she filled slowly as the tide rose. Salvage operations were carried out intermittently, weather permitting, until they were finally called off after a series of gales, on 3 January 1894.

From the subsequent enquiry it became apparent that the pilot, Abraham James Jenkins, who was at the helm when she struck, was not to blame, for a small rocky patch lying in four fathoms of water, when eight fathoms was marked on the Admiralty Chart, was twice found by different groups of responsible people. The marks for finding it are quite clear: the east end of Mincarlo just clear of the east end of Gt Minalto, and Crow Beacon open between the Steval and the shore, with the Coastguard flagstaff on Agnes over the middle of the Cow Rock. The patch is now marked on the current Admiralty Chart as Serica Rock.

It might be of interest to note that there was an official interim statement in the House of Commons concerning the number of lives lost and saved

during the November gales of 1893. From wreck statistics reported at Lloyd's for 16–29 November inclusive, the horrifying total is 298 ships lost, 64 steam and 234 sailing ships. Numbers for the same period the previous year were 39 steam and 48 sailing ships. The Board of Trade returns for the same period give 293 lives lost within 10 miles of land, and 525 lives saved in peril within the same limits.

References

- (1) Deposition Book, 1885–1900, MS. St Mary's Custom House.
- (2) General Letter Book, 1889, MS. St Mary's Custom House.
Wreck Letter Book, 1891–1901, MS. St Mary's Custom House; *Lloyd's List*.

Lofaro

The *Lofaro* was an Italian barque, 664 tons net, who was wrecked in Scilly on 2 February 1902, on a voyage from Hamburg to Cardiff.

It had been blowing a fresh wind from the east all that day, with a heavy sea, and at 5 o'clock in the evening the haze was thickening and it was coming in dark when Mr Leggo Ashford saw a barque running in, to the north of St Martin's Head. Mr Ashford was 85 last February, and he still lives at Middletown, St Martin's, and remembers how, as he watched, the barque broached and capsized, and remained on her beam ends. He gave the alarm, and some men ran to Higher Town to launch the gig *Emperor*, while the rest went down to the shore to see what they could do. Fourteen men went off in the gig to go around St Martin's Head, but once out of the shelter of the land they could make no headway and had to turn back, for the tide was setting against the wind, and the seas were enormous. Round Island had fired rockets and the St Mary's lifeboat was on its way, but meanwhile the *Lofaro* was breaking up fast, and watchers on St Martin's began to see objects coming in: a sailor's chest which was found to have the captain's watch in it; the top of a deck house with one man on each end, under the Day Mark inside Chapel Rocks; a little man coming in on some wreckage—but they were all taken by seas and drowned before they could reach land. Soon afterwards it grew pitch black—Mr Ashford said he'd never seen a darker night—and his first cousin Johnnie Bond fell over a cliff and broke his ribs while trying to save life, while his companions were hunting for survivors with lanterns. But it was all in vain and none was found.

It was at this moment, when the cries from the water had stopped and the men on land were looking for Johnnie Bond that the St Mary's lifeboat arrived on the spot. A vivid memory of the exceptional darkness of the night has remained also with Mr W. Cameron (see footnote 2, p. 97), one of the lifeboat crew, who describes it as 'the darkest night that ever fell

out of the heavens, so dark that you couldn't see the man alongside of you in the boat'. Somehow or other they had found their way in-shore near the 'Devil's Table' when the St Martin's men heard voices and called out to identify them. They answered, asking where they were, and immediately were told urgently that they could do nothing and should get out as soon as they could, for the area was dangerous and there was breaking water all around. Their instructions were to 'darken Round Island twice' and then steer west to come home through Tean Sound—which they did safely, though to this day Mr Cameron says that he doesn't know how they got out of there alive.

It turned out later that the Coast Guard, Mr Hill, had seen the vessel earlier in the afternoon, but had not noticed anything wrong, and at the time of the disaster had gone home to tea leaving the Watch House empty. It is still not known whether the vessel had struck the Seven Stones and then come in to Scilly gradually filling and becoming more and more unmanageable, or whether she struck the rocks to the north of St Martin's and foundered that way. No cargo was found and the ship was probably in ballast. She was identified from ship's papers which were washed up the next day, and the next morning the keel of the ship with stem and stern posts attached, and three bodies, lay on the beach—a grim reminder of a complete calamity.

The following poem was made up at the time by the Rev. Harris, Chaplain of St Mary's:

On the second of February
And a very rough sea,
When the Coast Guard had left
The Watch house for tea,
Mr Leggo Ashford, with his eye,
An Italian Barque did spy.
Rockets were fired from the Island Round
And a great consternation
Was made by the sound.
They launched the gig far
Over the bar—
With fourteen hands
She was well manned
And she kept good speed
While near the land.

It was recited to me by Mr Ashford who explained the importance of 'with his eye'—he saw the ship with the naked eye, not with the help of a telescope. It is nice to know that he still reads without glasses.

Reference

Lloyd's List.

THE ESCAPE OF ADMIRAL BRUIX FROM BREST

By R. C. Saxby

IT was as early as the autumn of 1798 that the French Directory made up its mind to attempt the relief of Bonaparte's forces in Egypt, cut off by the Battle of the Nile. In view of British naval supremacy the venture did not appear very promising, but circumstances were desperate and, in fact, the obvious difficulties of the operation made it all the less expected, and therefore more likely to succeed.

The only major squadron remaining to the Directory was that at Brest, and this was to be supported *en route* by the Spanish forces at Cadiz and other ports. It was also hoped that the Dutch would be able to assist, but in the event this part of the plan fell through. The first, and vital, sortie had accordingly to be made from Brest, and preparations were at once put in hand to fit out the largest possible number of ships there.

This was in no way as easy as it may appear. Brest was most uncommonly difficult to supply either by land or sea. On land the roads of Brittany were very bad, and were subject to constant attacks by the Chouans. At sea the British frigates constantly harried the coastal convoys, and made the transport of stores extremely hazardous. Furthermore, the French suffered from an extreme and chronic shortage of men. So serious were these factors, indeed, that it was for long gravely doubted in London whether the French were capable of fitting out a large fleet at all.

The kingpin of British naval strategy was, as it had been for fifty years, the Western Squadron stationed off Brest. In 1799 this force, the Channel Fleet, was commanded by Alexander Hood, Lord Bridport, a man of seventy-two. He had always been overshadowed by his more brilliant brother, Samuel, and until he took over effective command from the ailing Howe in 1795 was generally known only for the very dubious part he had played in Keppel's Court Martial in 1779. There he had been strongly suspected of manufacturing false evidence and, despite official exoneration, the mud had stuck. He had a name for being avaricious and domineering, was cordially detested by George III, and was barely tolerated by the First Lord, Spencer. In command he had not done badly, though often accused of being over-cautious and of subordinating strategic considerations to his thirst for Prize Money. He probably remained in power principally

because he was an old family friend of Pitt; and because his critics found it difficult to agree on any suitable successor. In fairness, however, it must be added that his blockade had in general been far more enterprising than that conducted earlier in the war by Howe, and that the Admiralty had shown a disposition to interfere excessively in the routine management of the squadron, provoking a good deal of friction and resentment.

In January 1799 Bridport was wintering at Bath, and the main body of the Fleet was ensconced at Spithead, safe from the winter gales which their Lordships feared more than the risk of a French sortie. Thus only frigates were at sea when signs began to appear that a major operation was being planned in Brest. As yet its destination was obscure, but its large scale was obvious. On 8 January that enigmatic personality the Duc D'Auvergne, who presided over Royalist intelligence from Jersey, reported that as soon as any privateers came into a French port their crews were being taken ashore and escorted to Brest.¹ This type of information was always significant, since it was well known that the French could not simultaneously maintain a large fleet and carry on a *guerre de course*. Any big switch of men had clear implications. In this instance these were rapidly confirmed by news that the building of at least one frigate had been suspended so that her rigging and masts could be moved a hundred miles overland to Brest, and that further stores and men were being moved, also by land, from Havre to Brest.

Further rumours were assiduously put about by the French. Attention was first drawn to Lisbon, then to Cadiz. Soon after this information was received that arms for 250 Irishmen were about to be sent to Youghal. Finally, one frigate commander obtained intelligence that the workmen at Brest were idle for want of materials.²

As February wore on, and turned into March, the stories multiplied. It was said that the general topic of conversation at Brest was an intended invasion of Ireland. A report from Frankfort said that thirty of the line were being made ready for Ireland or the Mediterranean.³ Reverting to the most fanatical days of the Revolution, the French were, one learned, proposing to carry the British Fleet by boarding. Frigates were being disarmed to provide crews, stores were coming in in 1200 requisitioned waggons. A British frigate observed that many neutral ships were going empty to Bordeaux to pick up cargoes for Brest.

By the middle of March Spencer decided that the blockade could no longer be left to Vice-Admiral Lord Hugh Seymour, and that it was time

1 Castlereagh, *Correspondence* (1848), Vol. II, 104.

2 National Maritime Museum, Papers of Sir S. Thompson, 7.

3 British Museum, Additional MSS., 35,200, 14.

for the Commander-in-Chief to put to sea. Orders were issued from the Admiralty on 19 March, and Bridport's flag flew from the *Royal George* at Spithead nine days later. For a while longer he stayed in reserve, but on 13 April finally sailed from St Helens with seven of the line.

From a British point of view, the situation at that time was not happy. The period of alert had gone on far longer than expected, and the frigates at sea were nearing the end of their endurance. Seymour, ordered back to England, was forced to tell the Admiralty that the only frigate on the station was the *Cambrian*, and she was in a bad state.¹ By 14 April in fact, the vital blockade was in the hands of Rear-Admiral Berkeley, who commanded six of the line, the *Cambrian*, a brig, a lugger, and a cutter.² The Admiralty had apparently been guilty of a most serious miscalculation. Nor was luck with them. On the 16th the frigate *Amelia*, already dismasted in a squall, and her sister, the *San Fiorenzo*, met three French frigates off Belle Isle. There was a sharp action, and both had to go into port, leaving that stretch of coast unguarded. Berkeley, with only one 'very unfit' frigate, was easily prevented from reconnoitring Brest by superior French outposts. He appealed urgently for reinforcements.³

All he got was Bridport with eight of the line and one frigate, the *Anson*; and this ten days after the *Triton* had reported twenty-seven ships at anchor in Brest water. The Admiralty had simply not believed such a concentration possible. During the next few days Bridport was joined by the frigate *Naiad*, and promised the frigate *La Nymphe*, for employment off Brest, but his only reinforcement of the line was the *Superb*, which came in on the 22nd with two cutters. She brought his forces up to fifteen of the line. Since the *Anson* had the day before seen seventeen of the line in Brest, fourteen of them apparently ready for sea, this was small comfort. Their Lordships had lamentably failed to concentrate their forces in the right place at the right time.

The Commander-in-Chief now took over where they left off. Despite an even gloomier report from the *Anson*, he sent her and the *Naiad*, with a cutter, to replace the *San Fiorenzo* and *Amelia*, leaving himself only with the *Cambrian*, which he admitted should be sent into port.⁴ He was not joined by *La Nymphe* until the 24th, when the sloop *Childers* also arrived.

It was on that day that things really began to happen. The *Caesar*, commanded by Sir James Saumarez, was close inshore, and she saw

1 Public Record Office, Secretary's In-Letters, Adm. 1/112.

2 *Ibid.*

3 P.R.O., In-Letters, Adm. 1/112.

4 P.R.O., Admirals' Logs, Adm. 50/124.

eighteen or nineteen of the line coming out of Brest Road and anchoring in Camaret Bay. At last the French were on the move. During the night Bridport closed in, and on the morning of the 25th observed thirteen of the line at anchor and five under sail in the Outer Roads.¹

The only frigate he had that was of any value was *La Nymphe*, and he sent her inshore to watch the French, with the *Superb* and *Dragon* to maintain contact. The rest of his squadron he took out again, three leagues from Ushant, and early on the 26th he wrote from there asking for reinforcements.

He was much too late. The crisis had already come.

The chief actor was *La Nymphe*. Captain Fraser had spent the night well up the Iroise, near Brest. About eleven a thick fog came up, and he lost sight of both Pointe St Mathieu and Ushant Light. It was still gloomy at five in the morning of the 26th, and even though he stood right in to the Black Rocks he was unable to see anything. He tried again some four hours later, and at 9.00, just as he had come abreast of the Black Rocks, he saw through the haze what he took to be the French fleet, eleven sail in two divisions. He tacked and moved back ahead of their Lee Division, pursued by a large frigate. At 9.30 this brought him within sight of the *Superb* and *Dragon*, and he made to them the signal for the enemy on the starboard tack, giving the bearing. Despite the fog, Fraser made no attempt to confirm that he had been understood, nor did he make any other signals. He merely continued to watch the French for the rest of the morning.²

This was astonishing behaviour. It was, however, no more so than Bridport's. At 6.00 a.m. on this fateful morning, when he must have been on the alert for news from Brest, he sent the *Cambrian* to the north-west to examine a strange sail, and at 12.50 he sent the *Childers* on a similar errand to the north-east.³ He thus left himself entirely dependent on *La Nymphe*, and she was failing him completely.

Captain Fraser lost touch with the French about 12.30. Half an hour later he wore, and put back to look for them, without success. He thereupon assumed that they must have put back to Brest, which was, one would have imagined, a most unlikely thing for them to do in such perfect conditions for escape. On his way to confirm this supposition he once more encountered the *Dragon*, and was asked to repeat his earlier signal, which she had been unable to read. He obliged. This time the *Dragon* did make it out, and at 1.8 duly passed on to Bridport the news that the enemy were in sight. He spent a considerable time trying to get further details, discovering

1 P.R.O., Admirals' Logs, Adm. 50/124.

2 P.R.O., Adm. 1/112.

3 P.R.O., Adm. 50/124.

no more than that the ships seen were of the line, and it was only at 2.56 that he made the signal to chase.

More than two hours had passed even since *La Nymphe* had last seen an enemy, but excitement, so far as Bridport was concerned, was kept alive a little longer by a signal from the *Superb* at 3.2 that the enemy had eleven of the line. This was clearly based on what Captain Fraser thought he had seen at 9.00. He was far less confident now. In fact, Bridport's signal to the fleet to chase an enemy squadron which he now firmly believed to be back in Brest threw the captain into a panic. He tried desperately to think of some signal which would stop the alarm without committing him to any definite statement. All that came into his head was to annul his previous signal. This was repeated to Bridport at 3.19, and three minutes later he called off the chase under the natural impression that the whole affair had been a false alarm. His only further action that day was to demand a written explanation from Captain Fraser. He received it that evening, and it is from it and from the Admiral's Log that one can best reconstruct the British view of the day's events.

This bears little relation to the actual movements of the French fleet. Bruix had, in fact, been well away through the Passage du Raz before ever the alarm was sounded. All that *La Nymphe* ever saw was a small decoy squadron of three ships of the line and one frigate. The main body had kept quite clear of her in the fog, and moved away to the south.

Thanks to his own dispersion of the few frigates he had, and to the stupidity of Captain Fraser, Bridport had completely failed. But this he did not yet know. Not until next morning did *La Nymphe* go in to look again, and even then her commander could not do the job properly. At 5.10 he made the signal he must have hoped and expected to be able to make: 'Ships seen are at anchor.' Not until 7.20 did the truth force itself upon him, and compel him to another annulment. Then, and only then, did Bridport decide to look for himself, and find that there was but one ship of the line to be seen in the whole port of Brest.

He now acted with some speed, sending warnings post-haste to Plymouth and to the Mediterranean and leading his fleet, in obedience to standing orders, towards Ireland. Thereby he abandoned his last chance of fighting a major action, and left Bruix to St Vincent and Keith in the Mediterranean.

There is, however, an epilogue to this rather sorry story, which manages to bring into it a real element of humour, and even farce.

On 29 April, while on her way towards Ireland, Bridport's flagship, the *Royal George*, fell in with the lugger *Black Joke*, bearing prisoners from a French schooner, the *Rebecca*, taken on the 27th. One of these prisoners

was an officer who had distinguished himself by clumsy and wholly ineffective attempts to destroy the documents he was carrying. These, when examined, made it quite plain that the French expedition was bound for Ireland. Most men would have found the incident highly suspicious, especially since the despatches in question were dated 5 April, but Bridport gladly accepted them at their face value and forwarded them to the Admiralty.

Here they were received with greater scepticism, and soon discounted. For they were in reality part of an elaborate ruse, and one that had quite ludicrously misfired.

The *Rebecca* had sailed from Brest as early as 17 April, with the one aim of being captured. All she did was to prove the ineffectiveness of the British blockade, since she failed to find even one cruiser to oblige her. In the end she sprang several leaks, and retired to Camaret for repairs. She tried again on 23 April, but was becalmed and drifted back to Conquet. On the 24th she did find a British frigate, north of Ushant and three miles to windward of her. It did not, however, show any interest, and the *Rebecca's* commander did not feel he could make himself too obvious if he was subsequently to pose as an unwilling captive. He therefore anchored off Ushant, and stayed there till the 26th. By that time his vessel, and her stores, were in such state that he doubted if she could persuade anyone she was bound for Ireland.

He was, as has been said, captured at last on the 27th, and his despatches, as well as his story of misadventures, found their way into Bridport's private papers.¹

There one may most conveniently leave the cautionary story of how Admiral Bruix, having given three months' notice of his intentions, escaped from Brest without a shot being fired at him. It is not a tale from which anyone emerges with much credit.

It may be worth quoting here Captain Fraser's letter to Rear-Admiral Pole of 26 April, since I am not aware that it has been printed before:

I suppose from the Admiral's signal to speak the *Nymphe* you are at a loss to understand what all the signals that have been made today meant, and as it is possible the officer who will answer it may not feel quite competent to the Explanation, I send him armed with these few lines. According to the Admiral's wishes, I stood into Brest Bay last night after dark, and bringing Ushant Light to the Westward of me, I brought too with the Ebb, with my head to the Westward. It came on so thick at 11 that I lost sight of both St. Matthews, and Ushant Light. At 5 I wore, and stood in to the Black Rocks, but it was so Thick I could not see anything. At half past 8 it appearing to promise better Weather, I again stood in, and at 9 when I had just gained the length of the Black Rocks I discovered through the Haze (to appearance) *the body* of the French Fleet under weigh, that is to say, I counted Eleven Sail, in two divisions, or lines, standing out, with a large Frigate, far advanced ahead of them, the rest of the Fleet were partly at an Anchor, and

¹ The *Rebecca's* story is folio 179 of British Museum Add. MSS. 35201.

some appeared to have their Sails loose. I tacked in the Wake, ahead of the Lee Division, and the Frigate gained upon me a good deal, and set her Topgallant Sails for a moment. About half past 9 I discovered the two ships, the *Superb* and *Dragon*, and as it was extremely hazy, I thought the fewer Flags likely to be best understood. I made the Signal for the Enemy on the Starboard Tack, and afterwards their Bearing. I kept sight of the Enemy till half past 12 when the Fog was so Thick I loss'd them. At 1 (or before) I wore, but could not again see them. I suppose they put about, and stood in again to their Anchorage as the headmost Frigate wore at $\frac{1}{2}$ past twelve. When the Fog cleared up, the *Dragon* made my signal, that the preceding one was not distinct (which I had made early in the Forenoon) I then repeated it, and of course stood in, to make the Anchorage if possible before dark, to observe the Motions of the Enemy, but upon the *Dragon's* repeating my Signal the Admiral made the Signal for a General Chace, as if the Enemy was that moment in sight, and observing several of the Ships of the Line making a great deal of sail, and fearing the consequences, I made the Signal of annul, and which Signal, I conclude, has made the Admiral suppose that I had not seen anything, but there is no Signal in the Book that I could make to indicate that I had loss'd sight of the Enemy, and I did not think proper to make the Signal for the Enemy being again at Anchor until I was certain they were so, tho' it appeared to me, that they had returned again, as I run down and must have crossed within sight of them had they run to the Southward.

NAVAL MEDICAL SERVICE, 1793-1815

By Eunice H. Turner

IT is probable that had Roderick Random presented himself at the Navy Board and the Surgeons' Hall at any time during this period (except, of course, in the uneasy months between 1802 and 1803 when retrenchment and economy were the order of the day) he would have been accorded a much less dusty reception. During the long period of conflict with France surgeons, from being two a penny, sprang into the category of those persons whose services were much sought after; and not only was the lot of the surgeon affected. War is a great reformer and innovator, and the make-shift, somewhat hand-to-mouth, medical arrangements that had served well enough in times of peace and more-contained wars began, under the stress and strain of keeping upwards of 100,000 seamen fit and able, year in and year out, to hold the seas and resist invasion, to give way to the more methodical and professional service that was to emerge in the nineteenth century. The maintenance of an efficient medical service was prompted before all else by the urgent need to keep the seamen in an effective state of health to man the ships. Second to this first principle was the philanthropic desire, that can be seen in operation at all levels, to improve the lot of those to whom the country was so deeply indebted. The eighteenth century was an age of an awakening social conscience and scientific advance, and the spirit that had brought about the founding of the great London hospitals could not but infect in some degree this department of the national life.

The men upon whom fell the main responsibility for providing medical care for the Navy were the Commissioners of the Sick and Hurt Board, who operated as such until 1806 when their functions were transferred to the Transport Board; from the correspondence of both offices it is evident that they took their duties seriously and carried them out conscientiously and with sympathy.¹ As an administrative body they were not large, consisting of three to four commissioners and some thirty clerks. The salaries of the former ranged from £300 a year in the early years of the war to £500 a year in its later stages, while the clerks received wages ranging from £150 a year to £80 according to their status. For these not over-generous sums the volume of work with which they had to deal was enormous, involving, as it did, the establishment and maintenance of hospitals and hospital ships and their staffs at home and overseas, the appointment of surgeons, the victualling of ships in home and foreign waters in conjunction with the Victualling Board, the surveillance of sick quarters, and the care of prisoners of war. As if all this were not enough, the Commissioners endeavoured to give careful consideration and encouragement to any experiments which appeared likely to benefit the health of the Navy; in July 1799 they recommended that trial be made of a machine for purifying water aboard ship by means of filtration; in 1803 they were interested in the use of Kali as a means of making it possible to use salt water for washing clothes and linen; and in June 1813 there is approval for trying out a refrigerating machine in the naval hospital at Antigua; and there were constant experiments in the production of portable soup and lemon juice.

So great in fact was the burden of work that the department never did catch up with mounting arrears, the origin of which was often lost in the mists of long forgotten wars. Nor were the Commissioners as good civil servants as they were doctors; in January 1804 Dr Weir, in recommending the division of the Department into two branches, one for medical affairs and one for accounts, declared that the Commissioners were never there, being absent on visitations and other matters, while the office was run by the clerks. In 1799 the Board, when more than usually harassed by the Admiralty over the settlement of long-outstanding accounts, broke out in a passionate defence: 'at no time has an establishment existed adequate to current business of the office and bringing up arrears', and although several schemes were put forward with the object of relieving the pressure of work,

¹ This article is based principally upon the original correspondence which passed between the Lords of the Admiralty and the Commissioners for Sick and Hurt, the Transport Board and the Hospital Governors and referred to as N.M.M./Adm./F/25-37, N.M.M./Adm./E/45-52, P.R.O./Adm./98/23-28 and P.R.O./Adm./1/3534-6. A history of the naval medical service in the eighteenth century is being written by Professor Christopher Lloyd and Surgeon Captain J. L. S. Coulter.

none of them ever came to anything because the Commissioners were never granted the additional staff for which they asked. In November 1802 someone at the Admiralty had the inspiration that the Board's working hours might be lengthened from 10-4 to 9-5, which was answered by the argument that 'six hours in a day is as long a time as official business can be prosecuted with Alacrity and Effect'. Such an argument might not be without its supporters in Whitehall to-day, and in any case the situation was not such as could be remedied by tacking on a couple of hours to a clerk's day.

Along with this administrative congestion went the reluctance of the Treasury to spend money. Such reluctance had an honourable history, and it must not necessarily be assumed that it sprang from callousness and indifference. Two centuries before the great Cecil had laid it down that 'to spend in time convenient is wisdom: to continue charges without needful cause bringeth repentance', and although England had become a good deal more wealthy since the days when Elizabeth I had practised her 'glorious meanness', money was still a matter that must loom large in the eyes of any government finding itself matched not only against the most powerful continental country of the period but also by what must at times have seemed like the whole world in arms. On at least three occasions we find the Commissioners urging the Admiralty to bring to the attention of the Treasury the insufficiency of the funds at their disposal to enable them to carry out their work as they would like to do, and all through the war requests for the provision of a more liberal diet for the men at sea were often turned down on the grounds of economy, which reason was also advanced for the closing of hospitals and the reduction of their staff; and as late as August 1801 it was suggested that the issue of lemon juice should be restricted (as it had been before 1796) to the sick of the ship's crew. The crux of the matter was the fact that while the Commissioners envisaged the medical services as a permanent arm of the Navy, the Treasury, and through them the Admiralty, were unwilling to do more than expand temporarily and reluctantly the skeleton organization of the peace years and strain the existing machinery to cope with what they hoped might turn out to be a short-lived emergency; a hope which the lengthening years of the war gradually dispelled.

Under these administrative and financial difficulties the Commissioners are much to be commended for the work which they were able to do. They were generally doctors, and distinguished ones such as Sir Gilbert Blane and Dr Andrew Baird who, with a record of active service behind them, were actuated by a real concern for the welfare of the seamen and for the advancement of scientific medical care. Blane, prominent for his work with the West Indies Fleet during the American War of Independence and his

subsequent publications on the health of the Navy, with particular reference to the use of lemon juice for the prevention and cure of scurvy and the need of a more liberal diet than the old salted variety for the maintenance of the general health of a crew, was equally outstanding as a commissioner. During his years of office he pressed on with improvements in the diet and hygiene of the seamen and investigated many cases of alleged abuse and maladministration; in August 1798 he recommended that in the proposed instructions to surgeons the latter should be required to demand an issue of lemon juice when fitting out for a voyage; in November of that year he made an inspection of hospital ships, recommending in his report better ventilation and the provision of slop-ships through which new recruits could pass for cleansing before joining their ships; and in November 1801 he was asked to draw up regulations to prevent the importation of disease by the troops engaged in the Egyptian campaign. He left the Board in 1802 having characteristically made an issue out of the question of naval surgeons' carrying on private practice; this he was adverse to prohibiting on the grounds that the status and rewards of the surgeon were not sufficient to attract the best men and that the retention of the system would have no other effect than to increase experience.

Dr Baird was an equally outspoken and independent colleague, though perhaps more conspicuous in his capacity as inspector when he proved indefatigable in his visitation of hospital and ship. He was particularly urgent on matters of hygiene on which he saw eye to eye with Dr Trotter, recommending on his inspection of Lord St Vincent's fleet in August 1800 the removal of the hogs' sties from the vicinity of the sick berths; and his zeal was such that on several occasions the staffs of Haslar and Plymouth hospitals complained of his habit of walking unannounced into the wards and conversing with the patients.

Other distinguished commissioners were Dr James Johnston, Dr Blair, Dr Weir and Dr Harness, all of whom reported vigorously on conditions which they had been sent to investigate and of whom Blair stands out as the somewhat irascible member, quarrelling with his colleagues (particularly with Blane) but always with the best interests of the seamen, as he saw them, in mind. It was his criticism of the sick quarters which he had been sent to investigate at Yarmouth in 1798, which led to the establishment of a hospital capable of accommodating more than 100 patients, and in the same year he twice visited the madhouse at Hoxton to investigate the conditions of the insane patients.

It is one thing to investigate, to recommend, to report: all the good intentions of the Board depended in the last resort on the calibre and co-operation of the surgeons, and of these there was never a sufficient number.

It was reported in November 1796 that many of the gunboats were without any medical staff; in December of the same year the Regulating Officer at Waterford wrote of his inability to find anyone to serve as surgeon and agent there except at a salary of £30 per annum plus 6s. 8d. a cure; and in February 1797 investigations at the hospital at Lisbon showed that the establishment was depending entirely upon the services of the Portuguese assistant, the English surgeon being old and beyond work. In August 1797 Duncan was without surgeons; and when the acting surgeon of the *Belliqueux* was superseded as unqualified in April 1798 he could only be replaced by a man drafted from the *Eurydice* who had failed in his examinations and had no warrant. The situation improved as the war lengthened, but it was still possible in 1803 for a row to blow up over the urgent need of the *Calcutta* for surgeon's mates; a 2nd mate was seconded from the *Albion* together with the 1st mate of the *Hussar* whose captain strenuously opposed such a transfer, his only surgeon being ill in bed, expressing himself so forcibly that the Board rebuked him for his 'indecent letter' and demanded an apology.

The scarcity of surgeons stemmed from the unattractive conditions of their service, and it was the need for them that set in motion reforms that substantially improved those conditions. Required to satisfy the formidable examiners of the Surgeons' Hall and the Navy Board, to accept whatever commission they might be assigned, to provide their own instruments and medicines (until 1796), and to await over long periods of time the reimbursement of moneys spent in the relief of their patients, it is not surprising that the response of the better type of surgeon to a career that promised in addition little financial reward and no security was not an enthusiastic one. Thus in January 1797 the surgeon to the prisoners of war at Forton resigned his position on the grounds that 'it is neither profitable, comfortable nor respectable', and his pithy summation of his office could have been echoed by his fellow at Woolwich who in January 1797 retired on a pension of £50 p.a. after 30 years' service. During the Peace of Amiens many surgeons found themselves jobs as surgeons' mates aboard small craft. Nor was the status of the surgeon such as to recompense him for the lack of the more tangible rewards. The surgeon on the hospital ship *Medusa* complained that his opinions were disregarded by the captain and officers; when in August 1797 the surgeon of the *Argonaut* asked that he should be assigned a boy as a servant, a privilege enjoyed by the commander, purser, boatswain and carpenter, he was refused; and the surgeon of the gunboat *Adder* applied for a transfer in July 1803 on the grounds that he was set at defiance by a young woman who had been introduced on board by the lieutenant and to whom he appeared to have made over the command of the vessel.

The first effort to improve the position of the surgeon came from Commissioner Johnston who, in September 1796, had brought to the attention of the Admiralty the disabilities under which he laboured. Particular emphasis was laid upon the need to enforce proper regulations and an established code of professional practice. Hitherto the surgeon had come aboard his ship without either written instructions or orders, the accepted procedure being an informal interview with the outgoing incumbent who in a short conversation would endeavour to put his successor *au fait* with the situation on board and the health of the crew; after which matters were left to his own conscience and skill. The case for regularization was so energetically argued by Dr Johnston that the task of drawing up new regulations was immediately put in hand and these were issued in a final form towards the end of 1796; they represented the endeavour to set out the whole duty of the surgeon towards his patient. They ran to many clauses and set a high standard of conduct, requiring the regular review of the ship's company, regular visiting of the sick, the provision of a proper sick diet, and the cleansing and ventilation of the ship. Hereafter these formed the basis of what was expected of a surgeon.

Heartened no doubt by this encouragement the surgeons themselves initiated the next step in their proper recognition. In September 1797 they drew up a petition which was printed and signed by six of their number and this was amplified by a further petition in December of the same year. In these they drew attention to the inequalities of their pay and status compared with their opposite numbers in the Army, commenting particularly on their want of established rank and uniform. Their protests appear to have been pigeon-holed and we hear no more until August 1801 when it was decided that superannuated surgeons should be entitled to half-pay at the rate of 5*s.* a day; then silence once more descends. In September 1804 Dr Harness took up the cudgels, stressing the acute want of the right sort of men for the medical service and the lack of a commensurate reward; and this time with appreciable results. In December 1804 proposals for 'the relief and encouragement of surgeons in the Royal Navy' were drafted and accepted by the Admiralty. They provided for additional salaries to 'induce well qualified and respectable persons to enter the service', provisions for widows and children, increases in pay on the completion of 6 and 10 years' service, retirement after 30 years' service on half-pay at 1*5s.* a day, and the acceptance by the Government of the responsibility of providing the whole of the surgeon's supply of medicine.

This was followed in June 1805 by the provision of 'a distinguishing uniform'—full dress, undress and sword—with distinguishing ranks, and the naval surgeon need no longer feel himself at a disadvantage *vis-a-vis*

his military colleagues. Thus the surgeons' status was established. Echoes of former uncertainties appear in an account of an incident aboard the *Haughty* in July 1805 when the 2nd master and the pilot threatened violence to an assistant surgeon who was rejoicing, perhaps too openly, at the articles of the new regulations, and on board the *Melampus* in August when the captain ordered his surgeon to wear his old warrant officer's uniform; but in general it was accepted that the surgeons had become full members of the Wardroom, where in October 1812 they were asking for their assistants to join them.

Such was the framework within which the surgeons carried out their duties: what manner of men were they?

Sensitive but injudicious writers, isolating the episode of the mutinies, have tended to dismiss the surgeons as brutes and their medical care as non-existent. It is certainly not difficult to find evidence from court martials and elsewhere of drunkenness and incompetence and there was some disposition on the part of the mutineers to single out their medical staff for reprisals: but few men really love their doctors, and this is by no means the whole of the picture. When the mutineers came aboard the *Spanker*, the hospital ship at Sheerness, in May 1797 they complained only that the bread was too coarse and the beer too weak and expressed their approval of the clean condition of the wards. Bad surgeons there undoubtedly were. The keen eye of Dr Baird brought to light the rusty instruments and scanty medicines of Mr Cairns, surgeon of the *Princess Royal*, when on a tour of inspection in September 1804, and his survey of the sick in the Line of Battle ships off Brest in the same month brought retribution upon the surgeon of the *Terrible* whom he stigmatized as unfit for his job, and twenty-four of whose patients he sent ashore with shocking ulcers.

There were other such cases, but it is clear that they are outweighed by the greater evidence of conscientiousness and kindness, keenness and skill exercised in far from ideal conditions. Ranging over the period at random we find Andrew Baird, in the *Hector* lying off Cadiz in February 1798, submitting an intelligent and scientific report on the health of the crew upon whom he had been experimenting with a general issue of lemon juice and sugar with the most beneficial results over the issue of vitriolic acid or sour krout. The surgeon of the *Windsor Castle* wrote to the Board in November 1799 objecting to the forms which his captain had issued to be completed by him and his mate when treating the sick, on the grounds that it is ridiculous and inhumane to badger men in pain with irrelevant questions which they are in no condition to answer. The calibre of the 1st surgeon's mate of the *Monarch* is indicated by his release at the instance of Lord Keith to take up the post of dissector to the anatomical class at the University of Glasgow; and one can diagnose similar ability in William Fullarton who

carried out experiments in the field of ventilation in the *Prince*, and who in November 1804 sent drawings to the Board illustrating his proposals to aerate the more inaccessible parts of the ship, not reached by the wind-sails, by the use of a pump. The activities of these men indicate a high standard of professional conduct, which is particularly exemplified in the career of such men as Dr Trotter who rose from surgeon's mate to become the remarkable physician to the Channel Fleet.

Certainly the theatre in which he had to operate was a test of any good surgeon. It was the general rule that sick seamen should be treated as far as possible on board ship, and conditions there were not such as to aid recovery to health. The ships were overcrowded and ill-ventilated, damp and cold, and the company from which the patients were drawn were for the most part the naval counterpart of Wellington's 'infamous army': vagrants and paupers, pressed and quota men, inured to a hard life and often a profligate one. Dr Samuel Johnson had been earlier inspired to his oracular remark: 'a ship is worse than a gaol. There is in a gaol better air, better company, better conveniency of every kind, and a ship has the additional disadvantage of being in danger', and this description was still in a great measure not inappropriate. When fever broke out in the *Illustrious* in February 1804 the surgeon put it down to dampness, bad weather, lack of clothing and overcrowding, while the journal of the surgeon of the *Minerva* in October 1802 recorded that the prevalence of jail fever and scurvy originated in the reception of 100 seamen straight from French prisons. William Fullarton, when surgeon of the *Ceres*, complained of the state of the health of the men sent to him in November 1804 by the regulating officer, many of them being blind and scrofulous, having earlier pointed out in August that the men impressed 'wanted health, ability, and inclination to the service' and that a number of them had been discharged from hospital, such as James Bacon who had been treated at Haslar in 1793 for an ulcerated leg and a fractured skull. It was the constant complaint of the surgeons that the pressed men arrived on board without clothing, verminous and already sick and diseased, spreading fevers like lightning through the crowded decks; in August 1800 the surgeon of the *Polyphemus* reported that fever had spread throughout the ship, introduced by a draft from the receiving ship off the Tower where conditions were such that men had no hammocks, bedding or clothing and were sleeping on congested, damp decks. Soap was not in general issue, though Sir John Jervis had drawn attention to the efficacious results of its use among his fleet in November 1796 and Blane had been an earlier advocate.

Nor were the habits of the seamen such as to make them good patients. Thomas Gray, operated upon in November 1802 on board the *Juno* for an amputation of a leg, fell into such a violent rage with his mates (from whom

he was not segregated) that he burst a blood vessel and died four days later in Haslar. The surgeon of the *Acasto* wrote in August 1803 that he considered it 'no part of his duty to examine every prostitute that comes alongside', and also giving it as his opinion that general debilitation of health was caused as much by drunkenness as exposure. The problem of drink was of great concern to Dr Trotter who recommended in August 1800 that steps should be taken to reform the public houses in Plymouth, of which there were 120 in the dock area alone, suggesting that only those persons of approved good character should be allowed to keep them, and that constables should patrol the streets to keep order when the seamen came ashore to spend their prize money.

Improvements appeared in the course of the war, though the great difficulties of overcrowding and sorting out the recruits were never really solved. A great advance was the slop-ship in which men could be medically examined, cleansed, and provided with fresh clothing before being drafted to their ships. The gradual provision of adequate medicines and a more liberal diet with fresh meat and vegetables and fruit and the extension to the whole ships' crew of commodities hitherto reserved for the sick did more towards the prevention of disease, as did also the installation of stoves supplying warmth against the cold and the damp. More attention, too, was given to ventilation. Dr Baird recommended in December 1803 alterations in the hospital ship *Sussex*, such as the removal of galleys, bulkheads and spare cabins so as to provide increase of space forward, and the draft of instructions drawn up in July 1805 to a proposed 'Board of Health' drew particular attention to the ventilation and warmth of the sick quarters which should provide 700 cu.ft. per man.

Great strides were made in the prevention of smallpox by inoculation. In March 1799 it was recommended by the Sick and Hurt Board that the crew of a ship suffering from an epidemic should be inoculated before putting into port for supplies, and the Board also approved the proposal of the surgeon of the *Magnificent* in August 1800 to inoculate those members of the crew who had never had smallpox, extending this to a recommendation for inoculation throughout the Navy. In August 1802 the Board accepted an invitation to join the Governors of the smallpox hospital at St Pancras with a subscription of 30 guineas, and in September 1805 it was recommended that an article be inserted in the new edition of the *Instructions to Surgeons* advising general vaccine inoculation on board ship. The surgeon of Deal Hospital put forward the suggestion in June 1805 that a column should be appropriated in the books of His Majesty's ships to mark against each man's name whether or not he had had smallpox and whether vaccinated, a suggestion that implies prevalence of the practice. A quarantine

service existed at Sandgate Creek which it was proposed in January 1806 should be re-established more permanently on the Scilly Isles with a physician and assistant surgeon.

As has been seen, it was expected that the majority of the sick seamen should be treated on board ship, and although the captains and commanders often objected to this practice, holding that it reduced the efficiency of the ships as fighting units, the surgeons approved, many of them insisting that their patients were returned to them from the shore with additional troubles acquired in the hospital wards. Some professional jealousy, perhaps, was involved, for the seamen appear to have received no worse treatment in the land establishments, where the hospital staff in their turn complained that they often received patients from the ships who were as good as dead and beyond cure; the fixing of iron bars to the windows of Haslar to prevent desertion in November 1796 is not necessarily a reflexion on the treatment received inside the hospitals.

Of these there were many, some thirty or more, both at home and overseas; some long established such as Haslar and Plymouth, and others set up as the drift of war and the occasion demanded, as Deal and Yarmouth at home and Cape Town and Madras abroad. Here it was possible to give severe cases the additional care and attention that could not be afforded in the confines of a man-of-war. The average number of patients calculated in May 1811 (in connexion with a scheme of the Chaplain-General, Dr Owen, for the distribution of tracts and bibles) showed 1500 at Haslar, 1000 at Plymouth, with an average of 100 to 250 at the smaller and overseas hospitals; these carried establishments of governors, agents, surgeons, physicians, matrons, nurses, clerical staff and labourers, according to their size. At Haslar there was one nurse to every ten men at the wage of 5s. a week; the surgeons and physicians were paid at the scale of £250 a year with various perquisites such as house quarters and rights of grazing horses and cows in the hospital grounds. All ranks were accommodated together except at Haslar where the officers were given tent beds and extra utensils such as teapots and cups and saucers; and it was suggested at Deal Hospital in May 1798 that separate quarters should be provided for midshipmen away from the men. Insanity and smallpox cases were segregated, but operations were performed in the wards; in January 1804 Dr Baird proposed a separate room for surgical operations, an oval amphitheatre 12 feet by 9 feet with two tiers of seats and an operating table at the cost of £40, or to convert a ward for this purpose.

The hospitals were subject to regular inspection and the governors and agents were in close touch with the Admiralty. Whenever complaints arose, as they did from time to time, they were carefully investigated. The quality

of the staff at Haslar and Plymouth was high, and in evidence of this was the practice of allowing students and ships' surgeons to attend operations. When reflexion was cast on the conduct of Mr Cairns, the senior surgeon at Plymouth, in February 1806 following the dismissal of one of the nurses for drunkenness and insolence, it transpired that he was a skilled and assiduous practitioner of whom most of his staff spoke well, attesting that he visited his patients every evening between 7 and 8 o'clock, often coming in again after 10 p.m. in dangerous cases. The effect of comfortable quarters and good care on one patient in Haslar in August 1812 was a promise to mend his ways (his profession before the press gang interfered was smuggling) and, for good measure, an offer to inform upon boats employed in the 'guinea trade' and in conveying French officers over to France. Irregularities existed, but when they came to light, prompt action was taken, as at Deal Hospital with the dismissal of the matron in September 1801 and the assistant matron and sempstress (her daughters) who were never to be seen on the premises having delegated their duties to a washerwoman at 10s. 6d. a week.

Naval patients were also taken in by the local hospitals, in numbers sufficient to warrant a special form which the Admiralty issued to naval surgeons for use in recommending seamen discharged unserviceable from their ships but still in need of care. The great London hospitals also opened their doors to the sailors, though St Bartholomew's, Guy's and St Thomas's would not receive smallpox patients. In February 1814 it was calculated that there were 56 naval patients at St Thomas's, 20 at Guy's, 30 at St Bartholomew's, with 10 waiting for admission; the latter being subsisted at 1s. 6d. a day at a public house in the Borough. This service was extended with reluctance and the naval authorities admitted that the sick of the cities had the first claim on these hospitals.

Supplementary to the hospitals were the hospital ships which had the merit in the eyes of those seeking to cut expenditure of being quickly commissioned and dismantled as the occasion demanded. Here conditions tended to be somewhat makeshift, the ships being generally in an overcrowded state. The *Spanker's* surgeon reported in November 1797 that he had 63 men with ulcers and gunshot wounds in a ward 65 ft. long by 40 ft. wide; in March 1809 the surgeon of the *Matilda* suggested that she was too small, with insufficient height between the decks, for the job; and in January 1799 Edward Knatchbull was drawing the attention of the Board to the 'deplorable situation' of the hospital ship at Sheerness. Efforts were, however, made to bring about improvements on the lines suggested by Dr Baird for the *Sussex*, and in the instructions issued to Richard Wood appointed to the *Roebuck* in January 1794 in which the Board set out

exactly what was expected of the surgeon and how the hospital ship should be run: the men to be examined on arrival, washed and kept clean (those with contagious diseases to use hospital shirts) and put upon full, half or low diet, mustered twice a week and visited daily; the wards not to be crowded and to be kept well aired, and great care to be taken of the stores, especially the wine and sugar which were to be locked up. The question of overcrowding continued, however, to be an insuperable one, and the authorities were, moreover, not so sure that any saving was effected. There was a discussion in September 1796 on the relative merits of hospitals and hospital ships in which it was calculated that while the cost of maintaining a sick seaman at Plymouth was 2*s.* 8*d.* a day, it was at least double this sum on any of the floating hospitals. Their use, however, continued throughout the war.

Sick quarters and sick allowances also continued for the seamen and officers ashore, but they were regarded with increasing disfavour by the authorities, being costly and difficult to organize, open to abuse and conducive to the neglect of the sick. The accounts of Lord Nelson for sick quarters and the cure of his arm in March 1798 amounting to £135. 1*s.* 0*d.* were only passed after keen scrutiny and not as a precedent, and the same grudging acceptance was given in July of the following year to a sworn affidavit by Captain Edward Galway to £33. 13*s.* 6*d.* incurred in the cure of a sickness brought on while conveying despatches to England after the Battle of the Nile, there being no surgeon on the little exposed boat in which he travelled and being recommended by the surgeon of the hospital ship at Falmouth to seek treatment in the town. In August 1801 it was held that there ought not to be officers in sick quarters in Yarmouth if there was room for them in the hospital, and the authorities were of the opinion that the whole practice was often abused by men residing in their own homes and drawing money for overlong periods well over convalescence. Agents in the ports to which the sick men were brought found it extremely difficult to arrange quarters for them; decent households where they might have got proper care refusing to take them in for fear of infection, with the result that only the very poor or unscrupulous opened their doors. In the investigations into the sick quarters at Yarmouth that followed the protests of Admiral Duncan and his captains, Dr Fielding, the agent, defended himself against charges of neglect and corruption on the grounds that he had been unable to procure sufficient lodgings especially in a sudden emergency and that when he had the householders would not supply sheets nor wash them or the men's clothing. The result of the investigation was the setting up of the hospital. Similarly, Dr Johnston on visiting the sick quarters in Woolwich and Deptford in November 1799 recommended their abolition in place of a hospital ship; though in fact the

actual step eventually taken was to remove the sick to one of the London hospitals, and this was the practice by 1802. Later in that year the surgeons of ships at Weymouth were told to keep their sick on board and not send them ashore until room could be found for them at Haslar or Plymouth. Sick quarters with their risk of dirt and neglect were on the way out, giving place to the regular care and attendance of the hospital; and at least one patient must have thought well of the change as appears from the investigation into the case of Lieutenant Butts who was very comfortably settled in Haslar in June 1796 on a special diet of 'fowl, veal, lamb, asparagus and the best green tea' with the particular attention of his nurse to whom he made payments for individual nursing.

Special arrangements were made for the care of the insane, which followed the current practice of the time from which not even the King himself was immune. The very violent were usually sent to Bethlem Hospital, and the report by Dr Harness after visiting a seaman in August 1814 showed that patients there were fastened with a chain on one leg and provided with a bed of clean straw and two blankets. There was also an establishment for those less seriously afflicted at Hoxton run by Messrs Miles and Co. and at 'The Retreat' at York, and there were others run on what is termed the 'same mild system'. Provision was also made for mentally ill seamen in cells at Plymouth and at Haslar where a complaint was made in November 1811 that the special care which they needed was taking up too much of the staffs' time. In 1813 discussions had begun about building a separate asylum at Haslar; by the end of the war they were still going on and the project was not to be realized until 1818.

While the authorities on shore and the surgeons afloat were those chiefly concerned with the medical care of the Navy, it is clear that the seaman had a particular friend in his captain and commander-in-chief. Official regulations set out the duties of the latter in this respect but many bettered their instructions. In the early days before the surgeon was much in evidence the captains were responsible for the health of their crew, and even in the late eighteenth and early nineteenth centuries felt themselves to be just as knowledgeable on such matters as their medical man and their interest was not lessened. Captains of the fleet made frequent inspections of the hospitals ashore, and when in August 1800 one of his crew complained to Captain Grey of the *Ville de Paris* of want of proper attention at Haslar the matter was not allowed to rest until there had been a thorough enquiry followed by the dismissal of an assistant surgeon and the severe reprimand of another. The admirals were just as careful as their captains; Lord Nelson's solicitude for his men is well known as also Lord St Vincent's; Admiral Duncan's part in the establishment of Yarmouth

hospital has been noted. Besides making constant recommendations and complaints, they were also quite prepared to take action on their own account where the matter seemed urgent; Admiralty approval to follow. In March 1797 Sir John Jervis, as he then was, appointed John Gray, surgeon of the hospital ship *Dolphin*, to take charge of Lisbon hospital which he had found in a deplorable state; Sir John Laforey made a permanent hospital out of the temporary establishment he found at Gros Islet in the Bay of Martinique in July 1796, appointing a surgeon, agent and dispenser; while Lord St Vincent reorganized the hospital at Gibraltar which he had found quite inadequate for the needs of his fleet in November 1798. Between July 1797 and November 1798 Sir William Parker empowered one of the agents for prisoners in the West Indies to procure supplies of fruit, vegetables, milk and soap for the sick of his squadron and although the Commissioners had authorized him to do this they viewed with dismay the resulting bill for £11,359. 13s. 7½d.

Generally the authorities worked in harmony with the admirals and were prepared to give belated approval to their actions in far waters; but occasionally such approval was withheld as in January 1799 when St Vincent's appointment of a purveyor was not endorsed, it being preferred to contract at a certain rate per man per day. Similarly, Lord Keith's appointment of Robert Wright as general inspector of the sick and wounded, with a special duty towards the landings in Egypt, was not confirmed on the grounds of unnecessary expense. Occasionally the interference of the commander on the spot was not conducive to the general good, as when Rear-Admiral Knight took possession in July 1805 of quarters at Gibraltar usually occupied by the medical officers, interfering with the conduct of the establishment, keeping livestock in close vicinity of the wards and allowing an uncontrolled influx of the local people with the consequent introduction of drink and general demoralization.

But such actions were the exception rather than the rule; more typical were those of Lord Bridport when in July 1797 he gave Dr Trotter three days in which to set up the hospital ship *Medusa* at Plymouth, complete with stores and establishment, for which he authorized an expenditure of £300, and such was his spirit of urgency that the Admiralty and Board not only approved but sent additional supplies of lemon juice to which the Victualling Board added extra fresh vegetables; and away in the South Atlantic Sir Sidney Smith established a hospital on an island off Rio de Janeiro in November 1808, not fancying the unhealthy situation of the mainland.

None appreciated the importance of diet more than the commanders. In September 1799 Lord Keith made vigorous complaint of the quality of the

surgeon's necessities supplied to the *Defence* of which he said 9 lb. of tea were bad and 52 lb. of sugar only tolerable; while off Ushant in July 1800 Lord St Vincent, when making strict enquiries into the capability of the hospital at Plymouth to receive his sick, at the same time took the opportunity to urge the need for regular supplies of fresh vegetables and fruit.

Mention has been made of the impact of naval service upon Dr Samuel Johnson and no apology need be made for referring to one whose pleasure it was to pontificate upon every possible aspect of the contemporary scene. But he must not have the last word. To his diatribe 'when you look down from the quarter deck to the space below you see the utmost extremity of human misery, such crowding, such filth, such stench', Sir William Scott, the Judge of the Court of Admiralty, made the simple riposte: 'We find people fond of being sailors.' The Doctor himself would have been the first to appreciate and applaud the improvements that gradually took shape when he had left the scene, and indeed his outburst was typical of the eighteenth-century spirit that refused to accept or condone current ignorance and injustice and made possible the later schemes of reform.

The medical aspect of the naval scene is one of promise, not prejudice, its spirit manifest in the action of James Veitch, the second surgeon of the Royal Hospital, who wrote from his safe and comfortable job at Plymouth to the Lords of the Admiralty on 7 November 1805 as follows:

'Gentlemen,

A great & decisive action has been fought and no doubt many are wounded. I am ready if necessary to move for the time being to any point where the pressure of duty may fall.

I have the honor to be etc.,

J. Veitch.'

GRAINNE O'MALLEY

By A. MacDermott

'A most famous feminine sea captain called Grania O'Malley.' Sir Henry Sydney, 1576

IT is a curious fact that although the subject of this article was one of the most remarkable Irish women that ever lived, no mention whatsoever is made of her by any of the contemporary Irish annalists. The *Annals of the Four Masters*, and the *Annals of Loc Cé* are alike silent regarding her, and it is only from the Elizabethan State-papers that much reliable information is to be had.

Legends and stories are of course fairly numerous in the west of Ireland: though most of these are manifestly untrue and often absurd. They are for the most part scraps of much older legends, just tacked on to Grainne's name. That sort of thing is extremely common in Ireland as in other Celtic lands. Grainne Ni Mhaille (as she called herself), described as a haughty, fearless and dark-featured princess, was born about A.D. 1530 in the castle of Belclare, the daughter of Dubdhaire O'Malley, or O'Malley of the Black Oak, Chief of the O'Malley nation, and of Margaret his wife, of the same name and family.

The territory of the O'Malleys comprised all the coast and country round Clew Bay, as well as the bare and venerable Isles of Aran. The whole of this district was known as the Umhalls, or Owels of O'Malley, or countries owing allegiance to O'Malley.

Dubdhaire, otherwise known as Owen, was a mighty chieftain, and he also owned a great fishing fleet, doing a large trade in salt fish with Spain and England. It should be noted that there was far more sea-faring on the south and west coasts of Ireland during the sixteenth century than later. O'Malley in Mayo, O'Donnell in Donegal (known as the King of the Fish, from the extent of his trade), O'Sullivan Beare in Cork and Kerry, and other territorial chieftains all owned large fishing fleets and exported great quantities of salt herrings.

Moreover, they levied toll on all English and foreign vessels fishing in their waters. O'Sullivan Beare granted fishing licences to the Spaniards, but refused them to the English! Several foreign powers paid large sums for fishing licences. Philip II of Spain in 1556 paid £1000 a year (perhaps £20,000 to-day) for leave for 21 years to fish off the Irish coast.

A report by Sir Humphrey Gilbert states that there were no less than 600 Spanish vessels using Baltimore and the Blasquet Islands as centres, and there were also large French and Dutch fleets.

The clan O'Driscoll of Baltimore was notorious for its piracies at that time.

But to revert to our heroine: Grainne married at an early age Donal an Chogaidh O'Flaherty, 'Donal of the Battles', Tanist or heir apparent of the O'Flahertys of Ballinahinch, a powerful clan, fierce and hardy fighters by land and sea.

These O'Flahertys were the most contentious of all the bellicose clans of Ireland: they had a terrible name in the west. So fierce and formidable were their onslaughts that the Burghers of Galway and other towns used a form of prayer in their churches, saying: 'From the ferocious O'Flahertys Good Lord deliver us', and this legend could be seen over

the West Gate of Galway until quite recent times. Also in a petition to Pope Innocent VIII the Burghers of Galway described their country neighbours as 'Mountainous and Savage men by whom the Citizens are sometimes robbed and killed'.

The O'Malleys were notorious Sea-rovers and pirates from a very early age, but never a seaman of all the O'Malleys could excel Grainne O'Malley in driving a galley through a winter gale, or in ruling the wild and turbulent clansmen who fought and sailed under her banner of the White Sea-horse. 'Terra Marique Potens' is the latin motto of the O'Malleys, meaning powerful by land and sea, and Grainne herself in reply to questions by the British Government says that her living was 'Maintenance by Land and Sea'. I think that, in plain language, that just meant that nothing she could lay her hands on, whether ashore or afloat, came amiss to her. She raided the territories of neighbouring chiefs, and towns and villages on the coasts of Scotland, and God help the poor unarmed merchant ship that she would run aboard of with, maybe, 150 of her wild tribesmen armed with pikes and hatchets. 'Tis little enough they'd leave after them; only the bare hull—if they left that much.

Now in those days Ireland was governed by a Lord Deputy, acting for the English Queen, with governors of Provinces under him; and you may be sure that Grainne's way of living was not always to the taste of these gentlemen. More, by token, that whenever a rebellion occurred—which was pretty frequently—she would surely be behind it somewhere.

Sir Richard Bingham, the Governor of Connact in those days, was the man she most often fell foul of. He was cruel and treacherous, and being a notable robber himself (like most of Elizabeth's men), he had a marked distaste for anyone who happened to be in the same line of business.

This Richard Bingham had a brother called John by whom even he was outstripped as a thief and a liar. Well, one day John Bingham was hunting rebels when he came out on the coast opposite an island called Inisturk where Grainne's son Owen was living. Owen was a quiet peaceful young man who took no part in any rebellion, and always lived on good terms with the English. So when John Bingham asked for food and shelter for himself and his troops, Owen ferried them over to the island and entertained them in the best way he could. But the moment Bingham's ruffians got the chance, they rose up against their hosts and murdered them to a man, and then made off with 4000 head of cattle and 500 brood mares. It is, alas, the memory of such foul deeds that tends to preserve a bitter feeling among the Western Gaels even to this day. Small wonder if it made Grainne Bingham's deadliest and most cunning enemy.

After the death of her husband Donal O'Flaherty, Grainne had to leave

her home of Bunowen in Ballinahinch, which was seized by her husband's relatives, and she went back to the O'Malley country where she built a strong castle on the island of Cliara, or Clare Island in Clew Bay. The remains of that castle still stand overlooking the strand where her galleys were drawn up. And indeed it was inhabited till quite recent years, being utilized as a police barrack, and as a coastguard station.

Grainne married her younger daughter to Richard Gurke of Corraun, a neighbouring chief, whom the English called the Devil's Hook. Bingham refers to him as 'a terrible rebel called the Devil's Hook', and writes in 1593 that, 'as long as he and Grainne have power to make any stir, they will not appeal to Her Majesty'. Corraun is a wild peninsula on the north shore of Clew Bay facing Achill Island.

So now with the Devil's Hook to the north of her, and her nephews and cousins at Murrisk and Carramore to the south, Grainne was in as strong a position for attack or defence as she could wish. Moreover, she built a castle at Doona at the north end of Achill Sound overlooking Blacksod Bay; and then taking a fancy to the stronghold of Carrigahowlay right up in the north-east corner of Clew Bay, she got possession of that, by the simple expedient of marrying the owner, Richard-an-Iarainn Burke, meaning 'Richard the Lord', which was his real native title, but known to the English as Richard-in-Iron, because he always wore a coat of mail. Anticipating Hollywood, they married '*for a year certain*', after which either could divorce the other.

How long they lived together I do not know; but it is said that when Grainne had got her supporters into Carrigahowlay and other Burke strongholds, she waited for her husband to return from one of his many wars with the Joyces, and then standing on the battlements of Carrigahowlay she bawled at him, 'I dismiss you', and that was that.

This Richard-in-Iron was an important chieftain himself, of the great and important clan of the de Burgos, and a near relation of the Earl of Clanrickard. He was 'a great man, Lord of a wide sea coast territory' (*vide* a letter from Sydney to Burghley) and owned a fleet of trading vessels. He was also described by Bingham as, 'a plundering, warlike, unquiet and rebellious man, who had often forced the gap of danger, and as often had it forced against him'.

In the sixteenth and seventeenth centuries the Burkes were the most powerful tribe in Connact, or at any rate in Mayo. They owed their origin and glory to William, younger brother of Walter de Burgh, Earl of Ulster, who was famous for his bravery in war. He conquered Connact, having slain O'Connor, MacDermott, and O'Kelly in battle; but he himself was slain at last by Cormac MacDermott.

William and his posterity governed Connact for a long time under the title of Lords of Connact. William's daughter married Lionel, Duke of Clarence, son of Edward III. The descendants of Richard de Burgh are called Clanrickard. Others, descended from William, are called MacWilliam, and are divided into the two clans of MacWilliam Oughter or Uachter, i.e. Higher, and MacWilliam Eighter, i.e. Lower, referring to the territories over which they held sway.

If Richard-in-Iron wore a coat of mail, it would appear that it was his lady who wore the breeches. Sir Henry Sydney, the Lord Deputy, tells as that when he came to Galway in 1576, there came to visit him there, 'a most famous feminine Sea Captain called Graine O'Malley, and she offered her services to me whenever I would command her, with three galleys and 200 fighting men, either in Ireland or in Scotland. She brought with her her husband, for she was, as well by sea as by land, more than master's mate to him. He was of the Nether Burkes, and now I hear is MacWilliam Eighter called by nickname Richard in Iron.'

Sir Henry saw plain enough that it was Grainne who was the master, both by land and sea, but he made Richard a knight, which no doubt pleased the poor fellow, and Grainne was now of course Lady Burke, though devil a soul ever heard her called by that name in Connact. Grainne O'Malley she was and Grainne O'Malley she remained, despite her two husbands.

Most of Grainne's coastal raids were carried out in long, fast-sailing galleys drawing little water and pulling 20 or 30 oars when occasion required. They were ideal craft for this form of piracy, as they could make rapid descents on unsuspecting settlements, or on ships at anchor or becalmed, and then take advantage of every narrow and dangerous channel among the islands if pursued by men o' war. She took toll of all passing craft according to the ancient maritime law of Olnemacht; that is to say she took toll if the ship was strong enough to put up any resistance. If not, she took everything else.

Besides these galleys, however, Grainne had larger vessels, perhaps captured at sea, in which she made longer voyages (it may be remembered that both her husbands were considerable owners of sea-going ships). In them she swooped on the Chiefs of Munster and harried shipping in the English Channel. Frenchman, Dutchman, Spaniard or Portuguese, it was all one to Grainne.

It was while she was away on one of these forays that her third son Theobald Burke was born. He was nicknamed Tibbód-na-Long, or Tibbód of the Ships in consequence. It is recorded that on the very day she was brought to bed, a Turkish corsair attacked her ship, and was getting the

better of her men. Word was brought down to her in the cabin where she lay with her new-born infant. Springing up, she cried 'Go mba seacht measa a bheas sibh bliain ó inniré nach dtig libh a bheith lá amháin go mbeirisé' (May you be seven times worse in a year's time, seeing you can't get on for even one day without me). Then slinging a blanket round her shoulders, she seized two blunderbusses and rushed on deck dancing and capering about.

Her monstrous size and odd figure surprised the Turks. Their officers crowded to the taffrail to gaze, when, discharging both the pieces amongst them, killing or disabling the lot, she cried, 'Bíodh san fúibh lámh gan Coisreagan' (Take that from an unblest hand) meaning that she had not been Churched. After capturing the Turk, she hanged the pirate crew at Carrigahowlay! I like that touch of righteousness.

Later on Grainne took Tibbód to London, and presented him to Queen Elizabeth, hoping to get a peerage for him—for was he not as good a Burke as the Earl of Clanrickard himself, and as high-born as any nobleman of the Pale?—and sure enough he *was* made a peer, years afterwards, in 1628, not by Elizabeth, but by Charles I. Tibbód-na-Long then became Viscount Mayo, the first of an illustrious but unfortunate line, now extinct. The present Earldom of Mayo is of a later creation.

After the birth of Tibbód, Grainne kept pretty quiet for a few years; but when Richard-in-Iron died in 1583 and left her a widow for the second time, life became tedious, and she was soon back at her old trade of piracy and raiding.

She now made Carrigahowlay her headquarters. It was a powerful stronghold well defended by cannon, and with a safe and well-sheltered harbour alongside of it. Here she was besieged in 1579 by Captain William Martin and a strong body of troops raised by the Burghers of Galway whose ships she had plundered; but after three weeks of it, Grainne drove him off and nearly captured his whole band. They say that more than once she had driven her own husband Richard-in-Iron from the walls.

Her son Morrogh O'Flaherty, who had regained possession of Bunowen, was a good subject of Queen Elizabeth, so good indeed, that his mother brought a navy of galleys to Ballinahinch: landed and killed several of his men, and took some of his cattle, to punish him for his ignoble submission to a foreigner! That was the way to 'larn' your boys in 1580.

Of course Grainne did not always have it all her own way. One time she made a swoop on the territory of the Great Earl of Desmond at the mouth of the Shannon, and having landed a party to raid the Earl's country, she had the mischance to be taken prisoner by the Earl himself who threw her into his dungeon. Later he sent her to Drury, Governor of Munster, who

kept her in prison for eighteen months and then sent her on to the Lord Deputy, describing her as 'Grany O'Mayle a woman who had impudently passed (overstepped) the part of womanhood and been a great spoiler, and Chief Commander and director of thieves and murderers at Sea to spoil this province.'—The Deputy met her at Leighlin Bridge and sent her on to Dublin; but when he got to Dublin himself he released Grainne—for whom indeed he had some admiration, and let her go back to the west on condition that she would behave herself. 'I'm going to have this country governed peacefully and properly' says the Deputy, 'and all fighting and piracy, and robbery has to stop.' But, as Grainne said, 'Sure how could there be any peace with all *that* law and order, in a country like Ireland?' So it was not long before she was warring with her neighbours again; and that was the time Captain William Martin went down to capture her, and was sent off with a flea in his ear.

Bingham cordially detested the whole brood of Burkes, O'Malleys, and O'Flahertys and never lost an opportunity of trying to damage Grainne. Fortunately for her she had a good friend at Court in the Earl of Ormonde who often interceded for her.

In 1586 there was another rebellion of the Burkes, and though Grainne was not in it, she came very near to be hanged by Bingham, who had got possession of her by means of a treacherous lie. He erected a fine new gallows for her in Castlebar, but just as she was going to take a swing, the Devil's Hook turned up and offered himself as a pledge and hostage for her good behaviour. Bingham set her free, but stole all her cattle and horses, and every other kind of property he could lay his hands on. He was in effect a far worse thief and robber than Grainne ever was.

Grainne was now getting pretty old and for a long time she gave up her trade of 'Maintenance by land and sea'; but the old longing and the old spirit were still there, so later we find her writing a letter to Lord Burghley asking him to procure 'Her Majesty's Letter, under her hand, authorizing her (Grainne) to pursue during her life, all Her Majesty's enemies by land and sea.' Not bad, says you, for an old lady well past sixty years of age!

Needless to say Grainne was not bothering over much about the Queen's enemies. All she wanted was an excuse for starting on a fresh career of piracy. The question of who were the Queen's enemies was likely to be given a pretty wide interpretation by Grainne O'Malley.

So far as is known Grainne paid two visits to Queen Elizabeth. It is certain that she went to London and had an interview with the Queen in August 1593, and the aimable Bingham, in a letter to the Secretary of State at the time, describes her as 'a notable traitress, and nurse of all the rebellions in the Province for 40 years'!

After leaving London she sailed down the Channel and up the Irish Sea, on her way home, having got what she asked for which was a widow's portion of one-third part of each of her two husbands' estates. Passing the Hill of Howth, she dropped anchor off the castle, and went up to pay her respects to the Earl, and to ask for some fresh provisions for her crew. She found all the gates closed, however, and in answer to her summons, the Janitor put his head out over the battlements and bawled, 'Who are ye, and what do ye want?'

'I'm Grainne O'Malley', says Grainne, 'and all I'm asking is the common hospitality due to a stranger.'

—'Faith we were thinking it might be yourself,' says the Janitor, 'tis oftentimes we heard of you before.—Well, you'll not come in here,' says he, 'His Lordship is at his dinner anyway, and he's not to be disturbed.'

Grainne never answered a word, but she turned away in black and bitter rage. Walking back to the shore she met a serving woman leading a beautiful child by the hand.

'Whose boy is that?' asked Grainne. 'He's son and heir of the Lord of Howth', said the woman. 'Ha!' cried Grainne, and snatching up the child she carried him off to her galley; got the anchor, and away she sailed for Clew Bay and her stronghold of Cashlaun na Cearc (the Castle of the Hen).

Well, you may be sure there was a fine towrow and tallyhoo when the news became known up at the Castle! Everybody roaring and screeching at the one time!

'Put out the boats and pull after her!' bawled her Ladyship. But what boats had they that were able to catch the like of her? And sure the very name of Grainne Maile was enough to drive every vessel on the coast scattering for safety.

Well there was nothing they could do about it, so the Earl of Howth, great nobleman though he was, had to make terms with Grainne.

The boy was restored, not on ransom, but on the word of Howth, that never again would the doors of Howth Castle be closed at dinner time, and that a place should be set every day at the high table for any chance wayfarer by land or sea, and that rule is observed at Howth down to the present day.

In 1590 Sir Thomas Lestrange took possession of the Aran Islands, to Grainne's indignation as they had always belonged to her people. So she collected a force of O'Malleys, Burkes, and O'Flahertys in three galleys and overran the interlopers in a very damaging manner, destroying their dwellings and seizing their movable property.

In 1601 she was in action with the British sloop-of-war *Tramontane* off the Donegal Coast, which pursued her towards the land, and then sent her boats to capture her galley, a powerful vessel of 30 oars and a hundred

musqueteers (*vide* the English Captain's report). After an hour's hard fighting one of the Queen's boats had been captured and destroyed; but the sloop managing to get within artillery range, the Irish were compelled to fall back, losing their galley. Grainne at this time was about 70 years of age. She died about 1603, the same year as Queen Elizabeth. She is buried at Clare Island where her grave may still be seen. Grainne left a number of descendants by both her husbands. I have the pedigrees of at least some of them, and it is interesting to note that the Dukes of Argyll, and Hamilton and the Earl of Coventry are descended from our heroine through 'the beautiful Gunnings'. She was the present writer's ancestress through Tibbód-na-Long.

It is curious that about 100 years after Grainne's time another redoubtable female pirate made her appearance on the west coast of Ireland and ravaged both French and English trading vessels. She was eventually taken by the French frigate *Ceres* and duly hanged at the yard arm, with two of her companions to keep her company, at her own request.

RECORDS

HOYMEN OF WHITSTABLE AND FAVERSHAM. LATE EIGHTEENTH CENTURY

By M. A. N. Marshall

During the eighteenth century the hoying trade of Whitstable and Faversham and the neighbouring port towns flourished greatly as corn and hops from the rich fields of Kent were conveyed to London in large quantities in local hoys. Several firms of hoymen made a good livelihood in this trade. But one of their main anxieties was to make sure that the goods to be conveyed should be brought in to them well in time before the day of sailing so that they might first be cleared at the Customs and no delay caused in the time fixed for sailing. Several of the Whitstable hoymen had business connexions at Canterbury where they had become well established, being freemen of the city.

WHITSTABLE

John Chalk, of St George's Street, Canterbury, hoyman, in 1774, sailed from 'Whitstable to Wool Key, London, on Fridays each week'. In 1777 he informs the public that he has been in business for fifteen years, and still sails his hoy to London. In 1778 he sailed the *Endeavour* hoy from Whitstable on Saturdays at high water returning the following Friday. We hear of him in business in Whitstable up to 1792.

Richard Elwyn who owned the *John and William* hoy for goods and passengers and who was a freeman of Canterbury was also in business in 1774. Passengers to London were charged the fare of 2s. 6d.

William Adams also sailed hoys to London at this time when he entreats his customers to send in their goods before the day of sailing as 'goods not cleared at the Customs were to be forfeited'.

William Baldock was also of Canterbury and Whitstable and he became possessed of property and a large hoying trade. In February 1776 he owned the *Success* hoy which he had recently

purchased from William Adams of Whitstable, and which sailed to London on Tuesdays and returned on Saturdays. He advises that 'the hoy being now repaired, is capable of Business in the fastest Manner, and strict attention will be paid to the Execution of all Orders entrusted to him, and the Favours of the Publick Gratefully acknowledged by their obedient and humble Servant'. Orders were taken in at the Two Bells, Canterbury, and The Hoy, Harp Lane, London. Later in 1776 William Baldock 'returns Thanks to the Nobility, Gentry, and his Friends in general, for the great Encouragement they have given him in his Business; and begs leave to inform them, that he has fitted up his Vessel in a complete and elegant Manner, with two Cabins, and a number of Beds separate from each other; he has also studied to alleviate every Inconveniency arising to his Passengers (especially to the Ladies) by a particular attention to such necessary Accommodation as the nature of a Sea Voyage requires. He further begs leave to inform them, that as the Laws respecting running Goods from one Port to another are very severe, he hopes no Passenger whatever will attempt to introduce or bring any contraband Goods on board his Vessel, as such an illegal Proceeding will not only subject him to the Loss of his ship, but the Person (so offending) to make good such Loss to him.' 'This is the completest Hoy for Passengers that has ever yet sailed in the Whitstable Trade.' The hoy sailed on Saturday evening and returned on Friday. Later in 1776 William Baldock acquired two other hoyes for the 'conveniency of the London Market during the Hop Season'; also he states that he has 'a large storehouse in Whitstable for the storage of Hops'. The *Whitstable* hoy was also owned by William Baldock, and it sailed in the trade to London in 1777-85 when it apparently became owned by Daniel Howard, hoyman. In September 1777 William Baldock refutes the rumour that he is quitting business by assuring that the 'Hop-Planters and Hop Merchants will please to accept my Thanks for their Favours of the last Year, and humbly hope they will think me entitled to the Part of their Employ in the approaching Season'. His trade increased and in 1778 he advertised for a 'sloop 85 to 110 Tons to answer the Purpose of a Hoy, strong built, and not many years in Service'. Further in 1778 he acquaints the public that he has opened a shop in Canterbury as corn chandler and has laid in a 'fresh Parcel of very fine Lemons, and Oranges, also Cake and Toy Gingerbread of every kind, also Spanish and Barcelona Nuts'. Families were to be supplied with the best at the lowest prices. He also attended the hop markets at the Saracen's Head, Ashford, for hops and oats to convey them to London in his hoyes during 1778 to 1779. He had a very flourishing business up to the end of the century.

Stephen Salisbury also had a large circle of customers in Canterbury and Whitstable. In 1782 he advises that he 'most respectfully acquaints the Gentlemen, Tradesmen, and others of Canterbury and the Public in general, that he has purchased a Hoy called the Providence, sailing from Whitstable to London'. He states that he 'intends sailing from Whitstable on Wednesdays, and returning on Tuesdays', and 'having fitted up his Hoy for the above business, in a complete Manner, humbly solicits the Favours of his Friends, and the Public in general, who may be assured he will make it his study to merit all Favours conferred on Their most obedient and humble Servant'. He will attend his warehouse in St Peter's, Canterbury, the day before sailing. Later in 1782 he became partner with *Thomas Brown*, hoyman, of Whitstable, who, in 1782, had purchased the hoy the *John and William* and the business of *Richard Elwyn*, sailing from Whitstable to London each week, returning from Galley Quay, Custom House. Up to 1792 Stephen Salisbury was still in business, and at that time he was partner with *William Nutt*, who had taken on Thomas Brown's part of the hoy, *Thomas and Stephen*. In February 1791 William Nutt acquaints the public that he has 'taken Thomas Brown's part of the above Hoy, in junction with Mr Stephen Salisbury, and hopes for the future favour of those who have so long given encouragement to the said Hoy'.

Daniel Howard, hoyman of Canterbury and Whitstable, owned the *Whitstable* hoy in 1785 which 'is now fitted, in good condition, and Every Thing necessary for Goods and Passengers, Daniel Howard, Master, will sail from Whitstable to Wool Key, London, and take in Goods and Passengers every other Thursday and Friday, for Whitstable, Canterbury, Bridge, Barham, Elham, Hythe, Folkestone, and Places adjacent, and takes in Goods and Passengers from the above Places to London, the same Days every other Week, at Canterbury and Whitstable'. Joseph Nicholson appears to have been a partner with Daniel Howard in this venture. Later, it

appears he was in partnership with Mr Reynolds. In 1787 he notifies that he 'returns Thanks to his Friends and the Public in general for the many Favours he has received during his partnership with Mr Reynolds, he now intends to carry on the Business on his own account', at the Fleur de Lis, Whitstable, and the Seven Stars, Canterbury.

William Elve, hoyman, in 1786 advises that he has a new hoy, the *Mary*, sailing to London; 'William Elve, from Dover, acquaints the Public, that he has fitted up a new Vessel, for the Conveyance of Goods and Passengers to and from London', and he 'sails from Whitstable once a Fortnight, on Saturdays, returns from Custom House Key, the following Friday. . . the Master may be spoke to at The Fleece, Canterbury, Bear and Key, Whitstable, the Kentish Hoy, Harp Lane, Thames Street, London', and that 'having been at some Expence to make his Hoy convenient for Goods, and Commodious for Passengers, he hopes for the Favours of those, who wish to promote a Scheme that must tend to Public utility'. William Elve continued in business up to the end of the century.

FAVERSHAM

In 1774 Edward Jones, Henry Jones, Edward Fairbrass, Thomas Rayner, Robert Collier, William Lepine, were hoymen in this port. At this time they notified the public that owing to increase in their expences 'all goods will not be carried by yearly Contract, but all goods to be paid 6d. per cwt, iron excepted, other parcels and packages according to their size and value'.

Edward Jones and *Edward Fairbrass* in 1780 continued to sail their hoys to London during the hop season. Edward Fairbrass owned the *Friends Goodwill* hoy which returned from London with goods for Faversham, Ashford, and the neighbouring towns. Edward Jones owned the *Stephen* and *Mary* hoy, and Henry Jones, the *Adventurer*. In 1779 three hoys sailed one week and two hoys the next week, and at Michaelmas during the hop season all hoys sailed during the week. In 1786 Edward Jones advises that he 'has found such convenience by not taking in any Corn, Hops, etc., after Thursday in his Week to sail for London, that he earnestly entreats his Employers to send them in on or before such Thursday; as he can easily convince them that his Business will be conducted with so much more Regularity and Dispatch by this Measure, he is doubly solicitous for their Compliance'. The goods had to be sent in in time to be cleared at the Customs before sailing. In 1787 Edward Jones again asks for a similar compliance from his customers, and he repeats this request for the next few years. Further in 1787 he and other Faversham hoymen, James Jones, Henry Jones, Edward Fairbrass, joined by Robert Collier, give notice that as a consequence of damage done to one of their hoys by the breaking of a bottle of vitreol on board that they refuse to carry anything of a similar danger except it be first notified before being taken on board and properly secured. In 1788 these same hoymen give notice that as it is impossible to 'take in goods at Chester Quay (London) with Regularity, think it necessary to inform their Friends the Grocers, Shop-Keepers, etc. that they shall remove to Griffin's Wharf, Battle Bridge, Southwark, for that Purpose. . . the Wharfinger promises to give every Accommodation possible to the Shippers', and they 'assure their Customers of their Care and Punctuality'. In 1789 Edward Jones, owner of the *Stephen* and *Mary*, anxious that other hoymen do not get his business, advises that he will 'take in Goods on the day of sailing', and not on the day before as formerly; passengers were charged 3s. fare. The Jones family continued in the hoying trade up to the end of the century. In 1788 Edward Fairbrass junior advises that he has taken 'his father's Hoy and Business; hopes by his Endeavours to give general Satisfaction'. He will continue sailing to London on Saturdays, taking corn and hops at the same price as other hoymen. In 1797 he advises that 'Hop-Planters and others may depend of the greatest care and exertion in getting their Hops to Market'.

Robert Collier owned the *Kent* hoy in 1777; he was rival to the Jones and Fairbrass trade. In 1785 he advises 'his Friends that he will change his turn of going to London, and will sail on Fridays, and continue to go every fortnight'.

Thomas Chapman was partner with *Thomas Rayner* of Faversham up to 1780 when he purchased the latter's hoy, the *Faversham*, and continued in business on his own account; he states that 'the Public's Commands shall be executed with the utmost Care and integrity'. He was in trade up to 1785 when in June we hear of the sale of his hoy, the *Faversham*, 80 tons, then lying in Standard Quay.

MILTON NEAR SITTINGBOURNE

John Page and *John Aldersey* were partners in the hoying trade at Milton but in 1783 this was dissolved, and *John Page* continued on his own account. In 1785 he joined with *John Huggens* in taking corn and hops to London in their hoys. In 1786 *John Page* acquaints his friends that he 'takes in Corn and Hops etc. on the Thursday in his Turn for London and not after, hoping for a continuance of their Favours'. In 1790 *John Page* went out of business, and there is the sale of his hoy, and goods, and his wharf, *Page's wharf*, his outbuildings and dwelling house, 'all of which premises have been for 100 years used in the hoying business'. *John Page's* successor was *Thomas Manclark*, who advises his customers in 1790 that 'his Hoy will sail to Battle Bridge Wharf, Southwark, every other Week'.

George Curling, hoyman of Crown Quay, Milton, in 1796, together with Mr D. Huggens, advises that 'they cannot take in Corn, Grain, or other Goods after Friday in the week in which they ship corn for the next ensueing Monday's Market, except Hops, in the Hopping Season which will continue to be shipped till Saturday night as usual'.

Sources

The Kentish Gazette (eighteenth century).

The Kentish Companion (eighteenth century).

Mr William Harvey of Whitstable has compiled a MS. dealing with Whitstable shipping from 1600 to recent times, which he has very kindly allowed me to look at.

NOTES

MAN'S EARLIEST SAILS

All interpretative works on the prehistory of the ancient Near East, as well as those on the history of sailing ships, tell us that the earliest representation of a sail is that painted on an Egyptian vase of the predynastic period in the British Museum (Fig. 1).⁽¹⁾ Such statements are not correct, for there is an earlier picture of a sail-boat to be found on another painted Egyptian vase which has remained unpublished. Ironically, this vase is on exhibit in the British Museum right beside the better known example (Fig. 2).⁽²⁾ Although both of these vases are without provenance, they fortunately have shapes and styles which enable them to be placed chronologically with a fair degree of assurance. Both are done in a ceramic technique known as 'Decorated ware', a term invented by the late Sir Flinders Petrie for the red-painted buff ware.

The previously published vase has a shape which belongs just before the First Dynasty, at the very end of the Gerzean, the last of the predynastic periods.⁽³⁾ The style of the painting on this vase also differs from the earlier typical Gerzean designs in certain details, such as the cross-hatched bird. The other vase has no features which definitely separate it from the usual Decorated ware of the Gerzean period. Its shape, the flamingoes, the gazelles, the triangles and wavy lines are all found on typical Gerzean ware. However, the shape of the vase, the triangular lug handles, and the solid-painted triangles are limited to the last half of the Gerzean, the Late Gerzean.⁽⁴⁾ If we place the start of the First Dynasty at 3100 B.C., then we can date the first British Museum vase to this time.⁽⁵⁾ It is only a guess that the Late Gerzean period may have covered a couple of hundred years. If this were true our second vase could easily be a hundred years earlier, say 3200 B.C. in very round numbers.⁽⁶⁾

The boat on the second British Museum vase is typical of those found on many other Gerzean Decorated vases. Petrie was the first to suggest that these constructions were boats.⁽⁷⁾ While de Morgan also accepted them as boats,⁽⁸⁾ this interpretation was immediately challenged by Torr who argued that they were forts with two block houses.⁽⁹⁾ Loret saw them as palisades surrounding

a town,(10) while Naville thought that they represented a town.(11) But Petrie showed that all of these arguments were pointless, since the questionable structures on the Decorated vases could be equated with several paintings on earlier Amratian dishes, with designs from a wall painting found at Hierakonpolis, and with reliefs on the famous Gebel el-Arak knife handle, all of which incontrovertibly showed boats.(12) There was no question in the mind of Boreux that these were boats when he wrote his massive treatise on early Egyptian shipping.(13) Edgerton summed up all

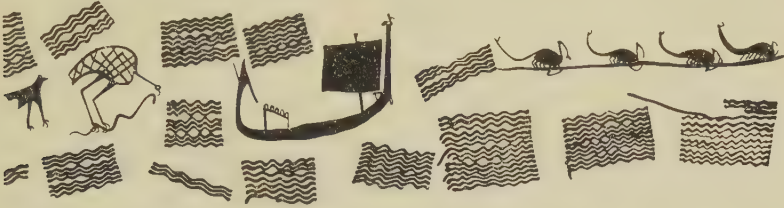


Fig. 1. Design painted on Egyptian Decorated vase (red-painted buff ware). The sail-boat depicted on this vase has previously been accepted as the world's oldest representation of a sail. The vase can be placed at the very end of the Gerzean period, just before the start of the First Dynasty, about 3100 B.C. (or 2900 B.C. on the low chronology). The vase is in the British Museum, no. 35324, and is 23 inches high. (After Frankfort, *Studies in Early Pottery of the Near East*.)



Fig. 2. Egyptian Decorated vase of the Gerzean period showing a sail-boat with a tall rectangular sail on a pole mast. The vase can be placed at least a hundred years before the start of the First Dynasty, about 3200 B.C. in very round numbers (or 3000 B.C. on the low chronology). The vase is now in the British Museum, no. 36326, and is 18 inches high. (Original drawings by the author from photographs.)

previous arguments and concluded that there could be no reasonable doubt that the structures were boats.(14) Now to-day we have the additional evidence from the hundreds of rock drawings of similar boats published in the late 1930's.(15) There can no longer be any doubt on the question: they are boats. Admittedly they are crude stylizations. Therefore in the case at hand we have the earliest representation of a sail-boat known to man (Fig. 2). In both of these British Museum boats the masts are far forward, almost in the eyes of the vessels. We must conclude that these craft could not do much more than sail directly before the wind.

RICHARD LEBARON BOWEN, JR.

References

- (1) H. R. Hall, *The Civilization of Greece in the Bronze Age* (London, 1928), p. 36, fig. 28; V. G. Childe, *What Happened in History* (New York, 1942), p. 75; S. Lloyd and F. Safar, 'Eridu', *Sumer*, Vol. IV (1948), pp. 115-27; E. K. Chatterton, *Sailing Ships* (London, 1909), p. 21; R. and R. C. Anderson, *The Sailing Ship* (New York, 1947), p. 18; R. D. Barnett, 'Early Shipping in the Near East', *Antiquity*, Vol. XXXII (1958), p. 222. British Museum vase no. 35324, purchased in 1901, provenance unknown. Drawing on pot: H. Frankfort, *Studies in Early Pottery of the Near East*, Vol. I (London, 1924), pl. XIII, 1.
- (2) British Museum vase no. 36326, purchased in 1902, provenance unknown. The author wishes to thank Dr I. E. S. Edwards, Keeper of the Department of Egyptian Antiquities, British Museum, for allowing him to examine this vase in November 1957. The author also wishes to thank Dr Edwards's assistant, Mr A. F. Shore, for arranging for photographs of the vase.
- (3) H. J. Kantor, 'The Final Phase of Predynastic Culture', *Journal of Near Eastern Studies*, Vol. III (1944), p. 116. R. D. Barnett, *op. cit.*, p. 222, is mistaken in assigning the vase to the Amratian period which preceded the Gerzean period.
- (4) For those familiar with Flinders Petrie's sequence dating (s.d.) this would cover s.d. 46-63 for the typical Decorated ware.
- (5) A date of 3100 B.C. for the start of the First Dynasty is acceptable to most American and English Egyptologists. However, many German Egyptologists favour a date of about 2900 B.C., as do some scholars who have worked on material from the Mesopotamian basin and correlated that area with Egypt. See W. F. Albright, *From the Stone Age to Christianity* (2nd ed., Baltimore, 1946), pp. 114, 320, n. 23.
- (6) Or 3000 B.C. on the lower chronology favoured by some.
- (7) W. M. F. Petrie and J. W. Quibell, *Naqada and Ballas* (London, 1896), pp. 40, 48-9.
- (8) J. de Morgan, *Recherches sur l'origine de l'Égypte*, Vol. II (Paris, 1897), pp. 91-4.
- (9) C. Torr, *L'Anthropologie*, Vol. IX (1898), pp. 32-5.
- (10) Loret, *Revue Egyptologique*, Vol. X (1902), p. 92.
- (11) Naville, *Recueil de travaux*, Vol. XXXIII (1911), pp. 196-8; Naville, *Archives suisse d'anthropologie général*, Vol. II (nos. 1-2), (1916-17), pp. 77-82.
- (12) W. M. F. Petrie, *Prehistoric Egypt* (London, 1920), p. 18.
- (13) C. Boreux, *Études de nautique égyptienne* (Cairo, 1925), pp. 10-20. See also C. Boreux, 'Les poteries décorées de l'Égypte prédynastique', *Revue des Études Ethnographiques et Sociologiques*, Vol. I (1908), pp. 36, 40, 44-51.
- (14) W. F. Edgerton, 'Ancient Egyptian Ships and Shipping', *American Journal of Semitic Languages*, Vol. XXXIX (1923), pp. 109-20.
- (15) H. A. Winkler, *Rock-Drawing of Southern Upper Egypt*, Vol. I (London, 1938).

COLLOQUIAL SHIP NAMES

Perhaps I may be permitted to add—shall I suggest an appendix?—to Commander Edgar K. Thompson's contribution on 'Ship's Names' that you published in the November 1959 number of *The Mariner's Mirror*.

In about 1878 an uncle of mine by marriage, the late Rear-Admiral Frederick Wilbraham Egerton (then a Commander) was Captain of H.M.S. *Salamis*, attached to the Mediterranean Fleet. On board he had his own private skiff, the backboard in the stern sheets being embellished with his family crest and Latin motto 'Sic Donec'.

'Sic Donec' meant little to the not very literate sailors of that era. But they were in no wise disconcerted. They christened her the 'Sick Donkey'! In due time the sobriquet reached the ears

of her delighted owner; and thereafter she was habitually referred to by him and the members of the family as the 'Sick Donkey'.

When Admiral Egerton retired the 'Sick Donkey' accompanied him to his Hampshire home, which possessed a most attractive water garden. She was housed in a specially built shed; and she was still there when last I saw her in 1938, shortly after the death of her owner's widow.

W. M. PHIPPS-HORNEY

THE LARGEST CHINESE JUNK AND ITS DISPLACEMENT

[C. R. Boxer, *The Tragic History of the Sea* (1959); G. S. L. Clowes, *Sailing Ships* (1947); I. A. Donnelly, *Chinese Junks* (1924); J. J. L. Duyvendak, *China's Discovery of Africa* (1949); J. J. L. Duyvendak, in *T'oung Pao*, 34 (1939); H. A. R. Gibb, *Ibn Battuta* (1939); C. E. Gibson, *The Story of the Ship* (1958); W. P. Groeneveldt, in *Miscellaneous Papers relating to Indo-China*, Vol. 11 (1) (1887); Jung-pang Lo, in *The Far Eastern Quarterly*, Vol. 14 (1954-5); J. Lyman, in *The Mariner's Mirror*, Vol. 29 (1943); G. Worcester in *Junks and Sampans of the Yangtze* (1947).]

The largest craft mentioned in Chinese writings measured 120 paces (600 feet) in length; although a partial sketch of this craft appears in an encyclopaedia called *San Ts'ai T'u Hui* dated 1609, the researches of Dr Joseph Needham, F.R.S., show that it dates back to the eighth century, and was not a sea-going ship but a square floating fortress intended for use on lakes.

The largest sea-going junks mentioned in Chinese writings were those which formed part of the fleet under the famous ambassador Chêng Ho, who commanded seven great expeditions which went as far as Hormuz, Aden, and Mogadoxu during the years 1405-33.

According to the 'Ming Shih' (History of the Ming Dynasty) the largest ships were 440 feet long and 180 feet broad (Groeneveldt, p. 168).

We have no convincing evidence regarding the size and displacement of these ships. We are therefore compelled to resort to probabilities. On the one hand we know that it is possible to build a wooden ship (*a*) which is 414 feet long, or (*b*) which displaces 8000 tons. On the other hand: (i) modern opinion considers that a length of 440 feet is 'improbable' (Groeneveldt, p. 168, note) and 'excessive' (Lo, p. 493, note 18); (ii) Chinese writers are sometimes apt to exaggerate; (iii) there may have been a 'Ship-builder's foot' which was smaller than the Ming official foot of 12.1 modern English inches; (iv) it has been said that it is impossible to build a safe wooden ship exceeding about 300 feet in length (Gibson, p. 145). We know that the Chinese formerly built large ships; even in Yüan times Ibn Battuta (c. 1343) records that the largest Chinese ships had 4 decks, 12 sails, and a complement of 1000 men. Dr Needham expresses the view that the Chinese built sea-going ships which were 300 feet long.

Mr Worcester (p. 27) thinks that the sea-going junks of Yüan times were considerably larger than those of the present day; the latter do not usually exceed 180 feet (Donnelly, pp. 29, 97). We can perhaps get a rough idea of the displacement by considering Chêng Ho's medium-sized ships; these are stated to have been 370 feet long and 150 feet broad (Duyvendak, p. 357, note 5); Mr Lo thinks that the average burthen of Chêng Ho's ships was about 500 tons (p. 493, note 18); if we assume that the largest ships had about three times the capacity of the medium-sized ships, as in Sung times (Duyvendak, *China's Discovery of Africa*, p. 18), then the burthen of the largest ships would be about 1500 tons, and the displacement about 2000 tons.

There is nothing impossible about a ratio of 2 to 1 for the relation between length and breadth; that was the usual proportion between length of keel and greatest width of the hull until the seventeenth century (Gibson, p. 127; cf. Clowes, pp. 47, 59). Perhaps a rough idea of the largest Chinese junks may also be derived from a consideration of the Portuguese carrack *Madre de Dios* captured by the English in 1592; it had an over-all length of 165 feet, a maximum breadth of about 47 feet, and a draft of 31 feet (Gibson, p. 126). Such ships had a burthen of 2000 tons, and might carry 800 persons.

The Chinese ships of the largest class must have been appreciably longer and broader than the

carracks, since they carried 200 more persons, and the carracks were grossly overcrowded (Boxer, p. 17), and had very high upper-works (Boxer, p. 25). The largest Chinese ships must have had a burthen of about 2500 tons, and their displacement would be about 3100 tons. The probabilities indicate that the largest Chinese sea-going junks were about 300 feet long, and had a displacement of about 3100 tons.

For a picture of the Chinese junk in the Catalan map of 1375 see Worcester, plate no. 4; for the Portuguese carrack see Boxer, plate I; for large modern junks see Donnelly, frontispiece, and pp. 28, 96; and Worcester, plates nos. 50-52.

J. R. MILLS

NIGHT SIGNALS: A BELATED AMENDMENT

Most of the blame for an error in the *Journal* is owed to the editor at the relevant time, namely myself. I refer to Admiral Holland's article on 'The Development of Signalling in the Royal Navy' (Maritime Miscellany Series No. 9), *M.M.* vol. 39. It occurs in several places on page 24, where the words 'false flares' should read 'false fires'. The fact is that things called 'flares' do not appear in naval signal books. Their use is specified in the International Regulations for Preventing Collisions at Sea, but the English version is still not always consistent, being 'flare-up light' and sometimes 'flares'. They are to be shown by every vessel to attract attention, in particular by sailing trawlers on being approached, and by pilot vessels on their station. Their colour is not specified. Smyth's *Sailor's Word-Book* defines a false fire as a blue light, but it seems very doubtful whether these two fireworks were the same thing. There is evidence that they were not, for the wording of the signal books is generally 'Blue lights or false fires'. Lord Nelson writes to Collingwood on 30 September 1805, 'I had rather that all the ships burnt a blue light or false fire. . . .' (Nicolas, Vol. vii, p. 57). A printed pamphlet (in my possession) is entitled, *Signals and Instructions for Ships under Convoy*, and was issued to Mr Job Anthony, Master of the merchant ship *Allegood* on 5 October 1801, over the signature of Captain Rowley Bulteel on board H.M.S. *Belliqueux*. Five pages in manuscript are added relating to 'Night Signals'. False fires, or blue Lights, or Rockets are specified for different purposes, and under 'Observations on the Blue Lights' is the following: 'N.B. The blue lights will in general be used as these Lights are more clear, strong, and lasting than that of false fires or Rockets.'

I have written to the biggest manufacturers of fireworks in London, who are contractors to H.M. Government, asking for information as to what false fires and blue lights may have consisted of, but received only a repulsive reply. I am afraid therefore I do not know. Anyway, so far as the *Journal* and the Maritime Miscellany are concerned, the amendment should be made as mentioned above.

HILARY P. MEAD

THE INCONSTANT MERCURY

One possible cause of the epidemic aboard the *Inconstant* is chronic mercury poisoning caused by prolonged inhalation of mercury vapour. Spilt mercury is notoriously difficult to collect up completely; it breaks up into tiny globules which penetrate cracks and corners such as are likely to be found in a wooden ship. In a warm climate the vaporization of this mercury would probably be sufficient to affect the men living in a confined space. Another possibility is that the food was contaminated with mercury causing acute mercury poisoning. At least these suggestions offer a better explanation than 'effluvia from the Spirit Room'.

G. H. FOXLEY

EARLY BUTTONS OF NAVAL OFFICERS

When uniforms for naval officers were first introduced in 1748 no descriptions were issued but pattern garments were lodged at the Navy Office and in Plymouth Dockyard. In 1846 three of these first specimen coats and three waistcoats were found at Devonport and were deposited by the Admiralty at the Royal United Service Institution. Unfortunately little was known of naval

uniform at that time and the coats were incorrectly identified and paired with the waistcoats as the uniforms of captains over and under three years' seniority and of commanders. It is now known that the coats are the full dress and undress (known as the frock) of a lieutenant and that for a midshipman, while two of the waistcoats should go with the two lieutenant's coats and the third belongs to a captain's full dress.

The original incorrect identifications have been the bane of artists and of writers on uniforms ever since. Two of those who were misled in this way were Captain A. Rowand, D.S.O., R.I.N., when writing his article 'Some early English Sea Service Buttons', *The Connoisseur*, 1927, p. 90 *et seq.* and Professor M. Lewis, 'Naval Buttons', *Mariner's Mirror*, Vol. xxxi (1945), p. 56 *et seq.* It is the object of these notes to set the record right as regards the early buttons. Before the advent of the anchor on naval buttons there were four types:

Type I was covered with plaited gilt wire.

Type II was gilt with a raised octagonal portion within a faintly indented circular rim. Between an octagonal line and the octagon's edge was a border of rings and in the centre there was a recess containing embossed foliage.

Type III was a plain smooth domed (or sugar-loaf) button.

Type IV was gilt, slightly raised, with a Tudor rose incised on it.

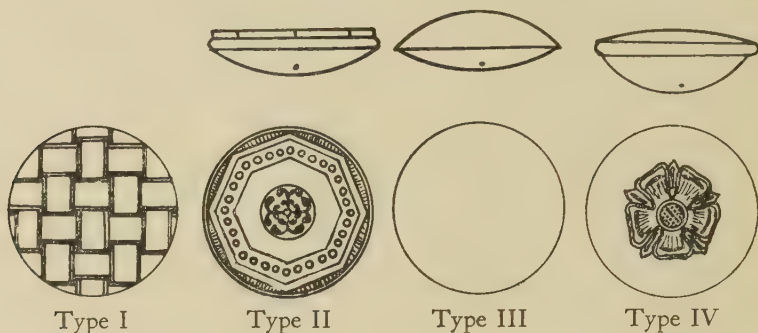
These buttons had the following uses:

Type of button	Uniforms on which worn	Authority
I	Flag officers Full dress 1748-67	Boscawen's full dress coat at Tregothnan
II	Flag officers Undress 1748-67 Only dress 1767-c. 74; full dress c. 1774-83 Unofficial undress c. 1774-83 Full dress 1783-87; undress 1783-87	Portrait of Boscawen by Reynolds, etc. Coat in Scottish United Services Museum, Edinburgh Portrait of William Parry by Rigaud, etc. Uniform regulations of 11 January 1783
III	Captain and commander Full dress 1748-67 Undress 1748-67 Only dress 1767-74 Lieutenant Full dress 1748-67 Midshipman Only dress 1748-87	Portrait of Gordon by Highmore, etc. Portrait of Keppel by Reynolds, etc. Portrait of Palliser by Dance, etc. Coat in Museum of Royal United Service Institution Coat at National Maritime Museum
IV	Lieutenant Undress 1748-67 Only dress 1767-68 Only dress 1768-87	Coat in Museum of Royal United Service Institution — Portrait of unknown Lieutenant

These four buttons were followed by flat ones with an anchor, but no crown, and these fall into three types:¹ the engraved anchor, the raised anchor within an oval and the raised anchor surrounded by a laurel wreath. In the button collection at the National Maritime Museum each of these is represented by two sizes, besides the small buttons worn on waistcoats, breeches, etc. It had previously been my opinion that the 1¼ in. engraved button was introduced for captains and commanders in 1774 and transferred in 1787 to warrant officers and midshipmen, who

¹ The special buttons of the civil branches are not considered here.

adopted the smaller $\frac{7}{8}$ in. button later, probably in 1795. The $1\frac{1}{4}$ in. raised anchor in oval is found on the captain's full dress of 1787-95 now in the Museum, and would suggest that this button was used until 1795 and that the same might apply to the corresponding $1\frac{1}{4}$ in. flag-officer's button. I have now, however, found that the Museum of the Royal United Service Institution has a captain's coat of 1774-87 with $\frac{7}{8}$ in. engraved buttons and this together with the mixture of



apparent $1\frac{1}{4}$ and $\frac{7}{8}$ in. buttons occurring in portraits would seem to indicate that the two sizes were worn concurrently, the larger size probably dying out for good about 1795. One particularly interesting picture is that of the Glorious First of June by Mather Brown. In this picture, in which the 1787-95 uniforms are portrayed with great accuracy, Sir Roger Curtis wears the larger buttons while those of Lord Howe and his other officers are of the smaller size.

W. E. MAY

EXPERIMENTAL NAUTICAL RESEARCH: THIRD MILLENNIUM B.C. EGYPTIAN SAILS

Mr R. L. Bowen's notes in the November 1959 issue, on his ingenious experiments regarding the sailing qualities of third millennium Egyptian sails, are of the greatest interest. Writing, however, with a slender knowledge of ancient Egyptian craft and considerable practical experience of trying to sail unpromising small boats to windward, I think there are quite a number of points which I might usefully raise.

First of all, I suggest that the question of hull form should receive more attention. Given a hull of efficient hydrofoil shape, there is no doubt that a tall squaresail, particularly if boomed at the foot, is capable of working to windward. Until topsails and topgallantsails were divided, sometime in the nineteenth century, the principal sails in square-rigged vessels of all sizes were of this category. Furthermore, the balanced lug, which was probably the most popular dinghy sail before the introduction of the gunter lug and the Bermudian, was little else than a boomed squaresail with the mast off-centre, so as to avoid the need for braces and a second sheet.

If Mr Bowen feels inclined to continue his experiments, I suggest that it would be a good idea to compare the performance of his squaresail on a centreboard dinghy hull with its already recorded performance on an almost keel-less one. The comparison would give some indication of the relative importance of the aerofoil and the hydrofoil involved.

The question to be answered is, therefore, not whether the Egyptian sail is capable of driving a suitable hull other than downwind, but whether the ancient Egyptian hulls were of a type that could be worked across the wind or to windward by their sails.

It is elementary knowledge that, to sail across wind or to windward, a hull must have lateral resistance, stability and effective means of steering. Of these, the first depends on the lines and profile of the hull, and on any added hydrofoil such as centreboards and leeboards. The second is largely dependent on the beam and shape of the midship section, and on weight distribution. So far as I can remember, ancient Egyptian hulls tended to be barrel-like in section, and, so, lacked

both lateral resistance and stiffness other than that due to ballasting and cargo stowage. It would be interesting to hear the views of members more versed than I in the hull form of these craft.

As regards steering, I have a dinghy with a strongly rockered profile and a mast stepped far forward. With centreboard up, sheet eased right out and rudder left free, she runs off before the wind. From their appearance, I should expect Egyptian ships to do likewise, and so require little steering with the wind right aft. To bring them across the wind, the steering paddles would have to overcome a certain amount of lee helm. Just how capable of this such paddles would be I cannot suggest. Being worked from the end of a long overhang would give them considerable leverage, but I certainly would not like to be one of several men balanced on that swaying perch while fighting three kicking paddles as the ship yawed about. It would be altogether too easy to get knocked overboard.

Lee helm, of course, tends to push a boat to leeward; but a nicely balanced hull generally has the centre of effort of the sails well forward of the centre of lateral resistance. Perhaps some member skilled in yacht designing will give his views on whether or not lee helm in these craft would be excessive with the wind on the quarter.



The results obtained by Mr Bowen surprise me. As a practical helmsman and a reader of technical books on yachting, I have understood that the ratio of leeway force to driving force is zero when dead before the wind, and that it increases continuously, although not at a uniform rate, to a maximum when close-hauled. In hulls with little lateral resistance, the resulting increase in leeway will reach a point beyond which the course made good remains much the same, despite further changes in the direction headed, well before the sails are close-hauled.

From fig. 5, Mr Bowen's boat appears to have reached this state with the wind abeam, when it made good a course about 55 degrees from before the wind. What is remarkable is that his boat, after making no leeway at all until the wind was brought 30 degrees on the quarter, suddenly began to make so much leeway that the course remained the same until the wind was brought 50 degrees on the quarter, after which its performance improved so that, as the wind was brought from 50 degrees on the quarter to abeam, the course made good altered from 30 to 55 degrees from before the wind.

This is so surprising that I suggest the possibility of an experimental error. In fig. 4, only four observations are plotted with the boat heading between downwind and with the wind about 85 degrees on the quarter. Two possible sources of such an error are the trim of the sail and the fore and aft distribution of weight, and there are no doubt others.

Personally, I prefer not to accept these results as conclusive, interesting though they are, until they have been repeated with many more readings, and using several different hulls. My own impression, based on sailing a variety of more or less keel-less boats, with sails ranging from a macintosh on a stick upwards, is that the Egyptians should certainly have made good a course 30 degrees from before the wind, and that a ship the size of the one in fig. 2 might well achieve 50 degrees or even more when loaded. It would be most interesting to build such a ship and see. Let us hope that one of the less violent manifestations of modern Egyptian nationalism will be the building of a full-size ship on ancient lines, and that she will be sailed over the courses of the ancient voyagers.

A final point I would like to raise is not directly concerned with Mr Bowen's experiments. Is it possible that the banana-like profile, with overhangs supported by a massive rope tourniquet, is an ingenious means of building a sea-going vessel from short pieces of wood, and hence with little longitudinal tensile strength? With a wave-crest amidships, such a 'banana-boat' would be strongly supported against hogging by her tourniquet, while, with a trough amidships, her raised overhangs would minimize sagging strains. The drawings illustrate this. The hull structure would therefore be subjected only to compression loads, which it would be able to accommodate.

I can see no reason for developing such a hull-form for use on smooth water, as a hull without overhangs would there be superior, in that it would be subjected to neither hogging nor sagging, provided that cargo was spread out fore and aft. I do not know what sort of a sea a strong upstream wind raises on the Nile. Perhaps some member has experience of this.

It could be pointed out that Mississippi stern-wheelers operating in smooth water had a similar longitudinal strengthening of iron rods carried through the superstructure; but these were needed when unloaded because the boilers were right forward and the machinery and paddle wheel right aft. When cargo was loaded amidships, it relieved the tension on these supports.

W. A. KING-WEBSTER

QUERIES

13. (1960.) HOISTING AND HAULING DOWN THE WHITE ENSIGN. I am interested in trying to obtain the origin or any information leading to why in ports or roadsteads the White Ensign is hoisted at 08.00 (25 March–20 September), 09.00 (21 September–24 March) and hauled down at sunset each day. This custom has through years been carefully defined in Naval Regulations. Nevertheless, I am not aware of the actual reason as to why these times were chosen, by whom, or for that fact, why the Ensign should be hoisted or hauled down.

Several answers have been suggested, but a factual or authentic reference is desired and would be appreciated.

H. F. PULLEN

14. (1960.) NAIL COLOURS TO MAST. When this nautical expression originated is not known, but an instance occurred 162 years ago which might have been its genesis. During the battle of Camperdown on 11 October 1797, a particular sharp action developed between Lord Duncan in H.M.S. *Venerable* and the Dutch Admiral de Winter in *Vryheid*. At some phase of the engagement, the flag haliards of *Venerable* were shot away and a young seaman, John Crawford, ascended to the main-topgallant masthead and actually nailed the English colours to the mast. Crawford was a native of Sunderland and the town, in grateful appreciation of his valour, had a medal struck in his honour. On one side, two ships in action with a scroll inscription 'Duncan and Glory'. On the reverse, a coat of arms, a quadrant on a shield with the motto 'Orbis est Dei' and the inscription: 'The town of Sunderland to John Crawford, for gallant services on the 11th of October 1797.'

Admiral Duncan's address to his officers who came on board *Venerable* for instructions previous to the engagement with Admiral de Winter was both laconic and humorous. 'Gentlemen, you see a severe Winter approaching; I have only to advise you to keep a good fire.'

Are other instances known of nailing the colours to the mast?

EDGAR K. THOMPSON

15. (1960.) SEASICKNESS. In the many years of its existence, *The Mariner's Mirror* has never dealt with the origin and history of this illness peculiar to those who go down to the sea in ships. Nelson was a notoriously poor sailor and our Admiral Alfred Mahan never acquired sea legs. I am initiating research on this nauseating subject and invite British readers to contribute data in their possession.

EDGAR K. THOMPSON

16. (1960.) NET DEFENCE. Can any reader describe how the net defences of a 'Majestic' looked when in position to resist torpedoes? Was the crinoline complete or was there a gap at the extreme bow and stern? Also roughly at what angle did the booms lie to the ship's side?

In the annual naval exercises pre-1900 did the 'Red' and 'Blue' fleets fly red and blue distinguishing flags or pendants while taking part? If so what flags were used and where were they flown?

The information is required for a miniature model of H.M.S. *Prince George* which I am building.

In photos a 3-pdr gun is sometimes mounted on the 12 in. turrets: is this for sub-calibre practice and was this position ever intended for use in action against torpedo boats like the *bofors*, etc., mounted on battleships' turrets 1939–45?

JOSEPH A. YOUNG

17. (1960.) **WHELPS.** Can any reader say what is meant by the expression 'whelps' in referring to warships of the time of Elizabeth I?

CHARLES GIBBONS

18. (1960.) **SHIP NAMES.** For the last couple of centuries we always seem to have possessed an *Inconstant* in our Navy until now. Inconstancy does not appear to be a particularly desirable characteristic to which one would aspire.

Can any reader explain the Admiralty's predilection for this name?

A. D. HOWNAM-MEEK

19. (1960.) **TONNAGE OF FISHING VESSELS: 'BUSS-MEASUREMENT'.** The first general Act for the measurement for tonnage of British merchant ships (13 Geo. III, c. 74) specifically excepted certain vessels used for carrying coals and those employed in the British white herring fishery. Subsequent Acts for the encouragement of the fisheries (e.g. 26 Geo. III, c. 81) refer to the manning and equipment of the vessels as being based on 'each ton of buss-measurement'.

What was the formula for determining the tonnage of busses, and in what Act of Parliament was it enacted?

W. SALISBURY

20. (1960.) **THE FINEST GUN SALUTE EVER.** Probably the finest gun salute ever given a reigning monarch in his own country took place on 17 February 1906 when the King of Portugal in his yacht *Amelia* at Lagos was saluted by the British Fleet composed of the Channel, Mediterranean and Atlantic Fleets with the first, second and third cruiser squadrons. This enormous fleet included twenty-nine battleships, eighteen cruisers and five small cruisers and scouts. As the fleet steamed in and let go their anchors, a royal salute was fired from each ship, a total of 1092 guns.

Was the number of 1092 guns ever equalled or surpassed at any of the naval reviews at Spithead?

EDGAR K. THOMPSON

ANSWERS

54. (1923.) **THE WOODEN WORLD DISSECTED IN THE CHARACTER OF A SHIP OF WAR.** This old query has seven very interesting questions which have not been answered to date. I limit myself to a comment concerning the origin of Kittysol or Kittyfol.

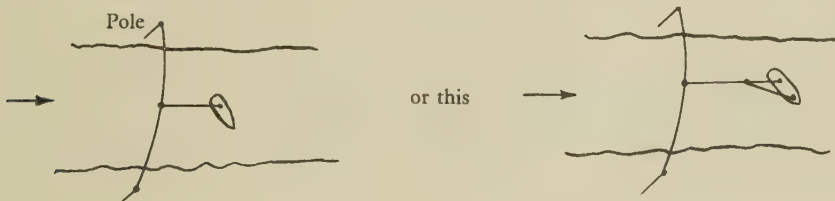
In Volume 8, *Indian Antiquity*, p. 232, we find that this word was only used in Indian Tariff regulations and was otherwise obsolete. It referred to an umbrella, especially those imported from China, made of bamboo and paper. This word was introduced into India by the Portuguese and is a phonetic pronunciation of 'quita sol', literally meaning 'take sun away'. A Kittysol Boy in India was a servant who carried an umbrella over his master's head.

EDGAR K. THOMPSON

12. (1959.) **DANUBE FERRIES.** In 1938 there was in operation at Avignon (France) beside the 'Broken Bridge' a ferry similar to that described by James Lightfoot. Memory does not serve as to whether there was merely one attachment to the boat or whether the line from the pulley divided near the boat and was attached bow and stern so that the boat lay about 45° to the flow of the stream.

The principle is similar to that of a kite; or, I believe, although I have never seen one, an 'otter' used for poaching trout in a loch.

A. R. CROSS



14. (1959.) UNDER WEIGH. I feel sure this answer by Edgar K. Thompson must produce several protests and I only write to add yet another.

In the *Seamanship Manuals* of 1905, 1908, 1922, 1932 and 1937, the list of sea terms includes 'weigh' (or 'weighing') and 'under way', but in no edition is the term 'under weigh' given.

I should be very interested to hear the authority for using the term 'under weigh' (in the British Navy) as I was certainly taught it did not exist.

Very occasionally I have seen 'under weigh' written but in every case it was an obvious mistake for 'under way'.

K. M. FARDELL

19. (1959.) BATTLE OF THE FALKLANDS. The square-rigger which passed close to the British warships during the battle of the Falkland Islands was the bald-headed, full-rigged ship *Fairport*, then under the Norwegian flag and homeward-bound from Antofagasta. She crossed before the cruisers *Inflexible* and *Invincible* whilst they were engaged with the *Scharnhorst* and *Gneisenau*, and it is said that Admiral Sturdee altered course to keep her out of danger.

That night, the same ship passed close to the cruiser *Glasgow* when she was picking up survivors from the German light-cruisers. The *Fairport* survived the war, and was burnt out at St Helena in the early 1920's when under the ownership of S. O. Stray of Christiansand, and re-named *Spangareid*.

There have often been reports that the sailing-ship at the battle of the Falklands was an unidentified French vessel, outward-bound. Since the *Fairport* was certainly there, and because such other vessel would have been bound in the opposite direction, it is hardly conceivable that the two vessels could have become confused and supposed to have been one. Thus the existence of the Frenchman can be assumed to be a myth.

ALEX A. HURST

The answer to Mr Williams's question is that the sailing ship which passed through the lines at The Falkland Islands battle was the Norwegian barque *Fairport*. I recently met Air-Commodore Rogers, C.B.E., A.F.C., who was a cadet in this ship at the time and later became a Midshipman R.N.R.

R. H. MANDLEY

[Several other readers are thanked for their letters on this subject, which must now be considered closed.—Editor.]

20. (1959.) THE WHITING SHOAL. This was first buoyed about 1750. The shoal is marked on a MS. chart c. 1590 amongst the Cotton MSS. in the British Museum and is probably to be associated with Richard Whyting of Bawdsey who held a fishing weir in the locality in 1405. The bank marked the seaward limit of the lost port of Goseford.

W. G. ARNOTT

23. (1959.) COMMISSIONS IN THE ROYAL NAVY. I make no claim to be authoritative, but for what it is worth I give the explanation furnished to me by a now deceased, and usually well informed naval relative, who was first commissioned during the reign of Queen Victoria, for the differences between the wording of Naval Officers' Commissions and those granted to Officers of the Army.

His explanation was that the Queen, under the influence of her German, and therefore militarily biased, husband, held the officers of her land forces in higher regard than those of her Navy. For the same reason she never signed the Commissions of Naval Officers, anyhow below Flag Rank.

On the latter point: quite recently I had occasion to examine a number of Commissions granted during the reign of Queen Victoria to Naval relatives of mine, including my father, and all of whom are now dead. My recollection is that all were signed by two Sea Lords and the Secretary of the Admiralty; but that the Sovereign's signature was conspicuous by its absence.

W. M. PHIPPS HORNBY

24. (1959.) *THE KING GEORGE*. This ship of 776 tons was built on the Thames by Perry in 1784, and was designed for the service of the East India Company. She made six voyages to the East between 1784 and 1798, and her log-books are preserved in the India Office Library.

Although Indiamen took out Letters of Marque as a matter of course, this was rather to improve their legal position in the event of their being attacked than to allow them to embark on a privateering career. Such activities on their part would have been contrary to their charter party. On occasion, however, the Government in India could order ships to sail on hostile errands, and this would be greatly facilitated if the Commanders carried Letters of Marque from the Home Government. I might add that such service was highly unpopular with the Commanders, as it deprived them of their customary privilege of making personal profits in the inter-port trade in the East.

W. SALISBURY

The following is an extract from *The Battles of the British Navy*, edited from *The Naval Chronicle*, Lediard, Campbell, James, etc., by Joseph Allen, R.N.:

'On the 31st January (1762) the British 38 gun frigate "*Danae*" . . . fell in with the French 26 gun privateer "*Tigre*" . . . the "*Tigre*" lost her bowsprit foreyard, and fore and main topmasts. . . the "*Danae*'s" lower masts and spars had suffered so much that it was impossible for her to make any sail after her enemy. . . the latter put before the wind and escaped. . . the "*Tigre*'s" loss is not recorded. The "*Tigre*" also beat off the 20 gun ship "*Deal Castle*", Captain Tindall; but was ultimately captured by the "*King George*", privateer, Captain Read, after two hours' action. On this latter occasion three of the "*Tigre*'s" guns burst and killed a great many men and her loss is stated to have been 80 killed and wounded. The loss of the "*King George*" was three killed; eight mortally and four slightly wounded.'

D. T. JONES

1. (1959.) *THE MAYFLOWER II*. I notice in the July *M.M.* that I seem to have elicited an answer from Mr Villiers on the method of handling the *Mayflower*. I wonder if he could not be prevailed upon to furnish an article on Arabian lateeners? He has indeed written a book on this subject, but it is one for the 'general reader', and what I need is an article for *seamen* describing the rig and method of handling. Of course he would notice and understand everything he saw in them, and it seems to me such an article would have a peculiar value, as I understand their method of going about is the same as that used in Mediterranean galleys in the last centuries of their existence, and it is one that—so far as I know—is ignored by eighteenth- and early nineteenth-century writers of Mediterranean nations, although pictures show it was much used at the time.

D. L. DENNIS

27. (1959.) *WEARING ONE'S FLAG*. Many people, including those who have served, or who are at present serving afloat, are often puzzled by the anything but uniform use of terms and expressions met with in connexion with maritime flags. One reads, for example, of ships and senior officers *carrying, flying, bearing, wearing, displaying* and *hoisting* certain *Flags*. It is not surprising, therefore, that on occasion this has led to heated arguments between senior officers, and others, having strong views on the subject.

There is little doubt that this confusion has been caused by the inconsistent use of these terms and expressions by those who, in the past, were responsible for drafting official regulations and instructions (see *M.M.*, Vol. 37, No. 4, October 1951, pp. 328-9).

However, it would appear that a very real attempt to rectify this state of affairs was made when compiling the 1956 edition of *Q.R. & A.I.* Thus, a ship is said to *wear* her colours, i.e. the Ensign and Jack; these are properly referred to as her 'suit of colours'. Again, she may be said to *fly* the Masthead Pendant, a Personal Standard or a Personal Flag, etc.: if a Standard or a Flag is to be used temporarily for a special occasion, she may *hoist* it. A person *flies* his (or her) Standard or Flag in a ship or on shore: and an Ensign and a Masthead Pendant may be *flown* at a shore naval establishment.

H. GRESHAM CARR

The correct answer to A. J. L. Hughes's query seems to be given in the *Admiralty Manual of Seamanship*, Vol. 1, 1951 (B.R. 67 (I/51)). In the chapter on Naval Ceremonial under the heading 'Flags and their Wearing' is printed the following: 'Colours, standards, and distinguishing flags are said to be "worn" by ships and by individuals, and they may also be said to be "flown" in a ship or place. Other types of flags are only described as being "flown", never as "worn".'

BRIDPORT

28. (1959.) WHITE ENSIGN ON CARS. About September 1948, instructions were issued to the effect that only the First Sea Lord may fly the White Ensign on his car. These were included in Q.R. & A.I. (1956), Art. No. 1281. Therein it also says that the White Ensign may be flown on cars used by a visiting Flag Officer or Commodore in a foreign country and Naval Attachés and Heads of British Naval Missions in the countries to which they are accredited, etc.

CAR FLAG OF THE CHIEF OF THE DEFENCE STAFF. The Chief of the Defence Staff, Lord Mountbatten, flies the flag illustrated in *Flags of All Nations*, Vol. 2 (1958), Plate 7.

The design of this flag embodies the colours and emblems of the three Services. It has a field, proportions two to one, having three horizontal stripes of equal width, dark blue (for the Royal Navy), red (for the Army), and R.A.F. blue (for the Royal Air Force). A badge, of generous proportions, is superimposed in the centre of the flag. This comprises a white and blue eagle (R.A.F.), two red swords in saltire (Army) and a dark blue foul anchor (Royal Navy) on a white background, encircled by laurel leaves in gold and surmounted by the Royal Crown in proper colours.

Her Majesty's approval of this flag as that of the Chairman of the Chiefs of Staff Committee was announced on 21 December 1956.

H. GRESHAM CARR

29. (1959.) NATIONAL FLAGS. THE UNION FLAG, ITS EARLY USE. SQUADRONAL COLOURS, ORIGIN OF THE RED ENSIGN. Whenever one is in doubt about the early use of the Union Flag and our three maritime ensigns the answer can usually be found in the erudite writings of W. G. Perrin, Cecil King and Commander H. P. Mead.

ORIGIN OF THE NATIONAL FLAG OF FINLAND. Finland was part of the Kingdom of Sweden from 1154 until 1809, when it was ceded to Russia.

Johann III of Sweden made her a Grand Duchy in 1566. At that time her arms comprised the red shield bearing a crowned lion rampant, in yellow; this shield was surmounted by a ducal coronet. In 1581 the King approved a white flag charged with an azure blue cross, whose upright limbs were off the centre and towards the hoist, with the above arms superimposed on the intersection of the cross.

The ducal coronet was removed when Finland became an independent Republic in 1917, thus leaving the flag as we have it to-day.

H. GRESHAM CARR

REVIEWS

A HANDBOOK OF FLAGS. By PREBEN KANNIK. Methuen and Co. Ltd. $7\frac{1}{2} \times 5$ inches; 203 pages; over 800 flags in full colour. Price 16s.

Some readers will be tired of hearing about flag books, but flag 'fans' among our members will rejoice in this latest addition. It is much the best production of its class so far to be published in this country, and the low price will bring it within the means of the slenderest purse which could not afford the more expensive volumes. Acknowledgements are made to the two standard English works already in existence, the Admiralty *Flags of All Nations*, and *Flags of the World* by H. Gresham Carr. It is gratifying, too, to see that our member Mr Carr is thanked for his assistance in preparing this book. The author is director of the Tøjhus Museum in Copenhagen and the original printing was in Danish. Publishers have promoted further editions in the United States and Great Britain, and it is understood that other countries will follow suit.

There are no fewer than 877 designs in full colours, greatly outnumbering those in Mr Carr's own book (300 + 200 drawings), and in the Admiralty first volume (182). So far as numbers go perhaps it is not quite fair to compare the Stationery Office publication, for a second volume is now out, and a third will follow in due course and all the subsidiary emblems will be included. The arrangement is geographical, dealing first with Iceland, then with the Scandinavian countries, and thence proceeding south through Europe via Great Britain, the Netherlands, Belgium and so on. There are many designs that have not appeared before in England, including those of Eastern Germany, featuring a badge with what look like a mason's hammer and dividers instead of the usual Soviet implements, within a wreath of ears of corn. This motif of ears of corn (probably barley) appears also in the 'arms' of Hungary, Bulgaria, Albania, Yugoslavia and China, and evidently stands for Communism. Among the other novelties, taken at random, are the ensign of a French cable-ship, and the three pendants appertaining to the Legion of Honour; the very distinctive arms and president's flag of Israel, embodying the seven-branched candlestick from the temple in Jerusalem. Although not particularly new, there are many examples from the United States of America not hitherto depicted in English works; for instance, the amusing flag of the Fish and Wildlife Service, and the striking Quarantine flag of a foul anchor crossed with the caduceus, blue on a yellow field.

Andorra is a small state wedged in between France and Spain, several miles from the sea. Its flag has caused the experts many a headache, and although it is hardly likely to be seen afloat it surprisingly finds a place in the Admiralty book; there it is depicted as of three *horizontal* bars (blue, yellow, red) and a coronet in the middle, while Mr Kannik and Mr Carr prefer to show it in vertical bars with a shield of arms in the centre. Even so Mr Carr's version of the shield differs in some particulars, including two yellow bulls on a blue ground facing towards the fly, instead of two red bulls on yellow looking towards the hoist favoured by Mr Kannik.

The ensign of Trinity House is shown in its former guise but this proves to be too good to be true. Omissions in flags of the same category are those of the Commissioners of Irish Lights, and incidentally it is a most peculiar fact that no flag author seems to be able to find the correct titles for the Commissioners of Northern *Lighthouses*, and of Irish Lights, generally mixing up the Scottish lighthouse authority with the *aurora borealis*! It is shamefully stated that the White Ensign of the Royal Navy served as a pattern for the naval ensign of the Union of South Africa, which consists of a white field having a very broad 'tartan' green, off-centre cross (with South African design in canton); it might be far more truthfully (if insultingly) said to be copied from one of the Scandinavian ensigns; it much more closely resembles that of Finland, for instance, than of Great Britain.

The book contains a brief glossary of technical terms, among which *Ensign* is defined as the flag worn at the stern of naval vessels and those administered by government departments, etc. For some reason merchant ships do not seem to qualify for a flag of that name. *Jack* is stated to be worn in the bows or *stern* in naval vessels! One can hardly believe this pronouncement to be intended.

This very comprehensive and accurate work, with its wealth of illustrations in bright colours, its rather slender but most attractive format and extremely reasonable price, can be thoroughly recommended to every class of reader.

H. P. MEAD

ONCE IS ENOUGH. By MILES SMEETON AND RUPERT HART-DAVIS.
 $5\frac{1}{2} \times 8\frac{3}{4}$ inches. Price 18s. net.

There have been many books written about long ocean voyages by amateurs: voyages undertaken in their own small vessels sometimes single handed and sometimes a husband and wife or a couple and a friend. This particular voyage was carried out by the author and his wife and for a great part of the way a male friend was with them. They set out from Australia with the idea of going round the Horn to England but that alas was not accomplished in spite of the most terrific display of endurance and 'guts' that anyone could show.

As the *Tzu Hang*—this was the vessel's name—was approaching the Chilean coast she ran into a terrific gale and during this gale one enormous sea turned the ship quite literally right over, and dismasted her. Mrs Smeeton was steering at the time, and was washed overboard but miraculously managed to get back on board; the vessel being now dismasted was more or less stationary. These three never-say-die people now proceeded to try and get the *Tzu Hang* sailing again and after several days and much hard work and ingenuity managed to get a workable jury rig on the ship and the vessel herself once more seaworthy. They then set out to try and reach a Chilean port and after many days they came to an anchorage in Arauco Bay. Here they were most kindly treated by the local people both naval and civilian, but there were many delays, so much so that the Smeetons' friend John, who was the expert carpenter-shipwright of the crew, had to leave them and go home by the more usual methods.

At last after many months the husband and wife set off to get to England in their own vessel, if not by going round the Horn, at any rate by going through the Straits of Magellan. But this was not to be; on Christmas day another gale caught them and on Boxing day their ship was once more turned right over, dismasted and yet remained afloat.

Once more this indomitable couple set about getting the *Tzu Hang* jury rigged, this time without their shipwright companion, and once more they overcame all difficulties, and got into Valparaiso, their navigating having been done by means of Mrs Smeeton's wrist watch, as the chronometer and barometer and radio set were all completely out of action and the coastal charts had vanished when the ship turned over. Eventually the *Tzu Hang* reached England on the deck of a freighter. This is a book that all would-be ocean voyagers should read and digest before they set out; if they take in all that the author has written their chances of survival will be very greatly increased; it is a most explanatory and well-written work. For the ordinary armchair reader the little charts at the head of many of the chapters are most helpful. The work is well printed and there are twenty-six good photographs as well as some extremely interesting and good little drawings showing how the ship turned over on each occasion, and the jury rig that was evolved after each dismasting; also the vessel's lines are clearly shown on a page to themselves. The only possible complaint about the book is that no dates are given anywhere, but that is a very minor point which will probably not worry 75% of its readers at all.

H. O. HILL

SHIPS' PLANS, A SELECT LIST FROM THE COLLECTION AT THE NATIONAL MARITIME MUSEUM. Compiled by A. H. WAITE and A. L. TUCKER. Greenwich, 1959. $8\frac{1}{4} \times 5\frac{1}{2}$ inches; 74 pages; 8 plates. Price 5s.

The vast collection of ships' plans accumulated by the Admiralty and now on permanent loan at Greenwich must be well known to most people. Only those who have had an opportunity to visit Greenwich, however, will appreciate the immense amount of work entailed in the sorting, repairing, and identification of the various draughts to make them readily available for reference. Including the Museum's own acquisitions, the whole collection now amounts to over 25,000 items dating from 1700 onwards, covering most nationalities and all types from small boats upwards. A great deal of progress has, however, been made by the Museum staff in this laborious task, and the present handbook is intended to provide a cross-section of the material available. In this it succeeds admirably, and full references are given to the draughts of over 700 named ships in addition to small craft and items of equipment.

The eight plates illustrate examples of naval and merchant vessels, both sail and steam. As might be expected, the majority of the plans listed are those of naval vessels, and of these all but a few are named and dated. The amount of research involved must have been tremendous, and it is not surprising to find that identification of the merchant ship draughts—where fewer sources of information have been preserved—is more open to error. It may be useful to mention here that the ship *Sarah Palmer* (T. 20017) was built at Warrington in 1855, and that the *Challenger* (T. 2003) was built in 1852. It has already been shown (*M.M.*, Vol. 40, 1954, p. 238) that the *Thames*, Turkeyman, must date from c. 1750, and it is probable that the tentative dates

suggested for other early draughts should also be put forward a decade or so. In all probability many plans will never be definitely identified, but there is no doubt but that individual members of the Society could be of great assistance to the Museum by communicating any information which may come to their notice. The more complete the record, the more valuable it will be. *Ships' Plans* is essential to all students of Naval Archaeology, and full credit must be given to the patience and industry of its compilers.

W. SALISBURY

OUT OF APPLIEDORE. By W. J. SLADE, edited and with a preface by BASIL GREENHILL. London: Percival Marshall and Co. Ltd. 9 × 6 inches; xxi + 127 pages; 20 plates; plans. Price 22s. 6d.

Out of Appledore is an unusual book. It is a saga, without histrionics, of a mode of living that is now gone, and so little understood that next to nothing has been written of it from the human point of view. Captain Slade, taken to sea in a trading ketch when a few months old, and regularly through boyhood, first saw the coasters in the closing years of their prosperity. Even if the sea was the same inscrutable foe, the little ships were well manned and there were enough men available to ensure that the incompetent remained on the beach. But by the time he became a regular hand the small steam coasters, the railways and the new motor lorries were beginning to take the parcel trade and much of the rougher bulk trade as well. Harsh economics made it necessary to cut down sails and spars so that in turn crews could be cut down. That the former measures did not always result in a poorer performance is shown by many interesting thumb-nail case histories, but the latter resulted in more and more work for the masters. How they had to be navigators, instructors, sailmakers, mechanics, naval architects and the rest, comes through clearly as one reads this fascinating book.

Since light relief often crept in among this breed of coaster crews, tightly knit in relationships, there is a liberal dose of quiet humour. There are accounts, amusing in retrospect, of struggles with those early auxiliary engines. Six pairs of big end bearings in one leg between the Bristol Channel and Youghal is not bad going, but it must have been no fun grovelling in the bilges as the ship rolled and tossed across the edge of the Atlantic. To name but a few high lights, there is an account of an exceptionally eventful passage in the *Millom Castle*; the sinking of the *W. D. Potts* by a U-boat; and mishaps among the treacherous banks and races of the Severn, all told with a reserve which will not deceive those capable of reading between the lines.

The book is rounded off with an excellent introductory chapter by Basil Greenhill, and some supporting appendices by H. Oliver Hill, Captain J. Whitefield and David MacGregor. I personally found it difficult to put down, and it left me with a question to ponder deeply. Why did this man, a life-long sufferer from seasickness, treated with mistaken harshness by his father, with more than sufficient business acumen to see clearly the fight ahead, stay in coasting sail at a time when so many similarly placed young men took their talents to other trades and other climes? One realizes that a strand-town like Appledore fosters a strong environmental tradition, but my guess is that the answer lies behind those fearless eyes in plate 3.

GRAHAME FARR

THE BIRTH OF THE STEAMBOAT. By H. PHILIP SPRATT. London: Charles Griffin and Co. 8 × 5½ inches; 149 pages. Price 28s. net.

The author of this book has already written several histories of the steamship largely in connexion with the models in the Science Museum, which in itself is a guarantee that the volume under review will be well worth looking at.

As the title suggests, this is a history of the earliest steamboats. In fact it starts a great deal earlier because the author begins by describing the paddle wheel, which was invented a long time before the steam engine, oxen or men being the motive power. As has happened on several other

occasions China led the way, as paddle wheels are reputed to have been used in that country about the seventh century, being operated by man power. The author then goes on to give in some detail the several forms and ideas as to how paddle could be used until he gets to the main theme of his book, the application of the steam engine to making the paddles revolve. Then begins the early history of the steamboat in general and the individual vessels in particular. For those interested in steamships of any sort this is an extremely interesting and valuable work. It is well indexed and has a very good and lengthy list of references, which should be of great use to the student, there are some interesting illustrations and the printing is good and clear. It is a book that can be recommended in every way.

H. O. HILL

OBITUARY

We record with great regret the death of Mrs Greenhill. She died in November 1959 at the early age of 33, in Bath, where she and her husband, Basil Greenhill, lived during their time in England between the spells of overseas employment in the Commonwealth Service.

Educated at Hollington Park, the London School of Economics and the Sorbonne, Paris, Gillian Greenhill served with the Foreign Office before her marriage in 1950. She subsequently lectured at Dacca and Karachi in Pakistan and at the Tsuda Women's University, near Tokyo.

She was the eldest of the three daughters of Captain R. T. Stratton, M.C., of Heddington, Wiltshire.

She was a member of the Society for Nautical Research for ten years, was an occasional contributor to the *Mariner's Mirror* and actively assisted her husband in his nautical research work in many countries of the world. In the last year she had done the bulk of the work on the catalogue of maritime films which is being compiled by the Photographic Records Committee for the National Maritime Museum.

Her untimely death is a loss to nautical research and to her many friends in the Society.

G. R. G. WORCESTER

CORRECTIONS TO VOLUME 45

- P. 145. For G. Appleton read S. Appleton.
- P. 339. Line 30, for 1668 read 1768.
- P. 338. Third column, for *Polyhemus* read *Polyphemus*.
- P. 215. Lines 9 and 13, for daighsa read dghaisa.

The following other publications of the Society are at present available for sale:

OCCASIONAL PUBLICATIONS: No. 5, *Lists of Men-of-War, 1650-1700. Part I. English Ships.* Compiled by R. C. Anderson. *Part II. French Ships.* Compiled by Pierre Le Conte. *Part III. Swedish Ships.* Compiled by Hj. Börjeson. *Danish-Norwegian Ships.* Compiled by P. Holck. *German Ships.* Compiled by W. Vogel and H. Szymanski. *Part IV. Ships of the United Netherlands.* Compiled by A. Vreugdenhil. *Part V. Indexes.* EACH PART 3s. 6d. (POSTAGE 5d.). No. 6. A Treatise on Shipbuilding and a Treatise on Rigging written about 1620-1625. Edited by W. Salisbury and R. C. Anderson. 15s., to members 12s. 6d., POSTAGE 4d. No. 7. List of English Men-of-War, 1509-1649. Compiled by R. C. Anderson. 3s. 6d. (postage 4d.)

THE MARINER'S MIRROR. INDEX TO VOLS. 1-35. Compiled by R. C. Anderson. Price 15s. (Members' rate 10s. 6d., POSTAGE 10d.).

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British Coracles, Parts I and II, by J. Hornell. Price 2s. 6d. each.

Types of British Coastal Craft of the British Isles. Price 1s.

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PLANS: Model-maker's Plans of the *Victory*, 10 plans on 3 sheets from those used in the restoration of 1923-35. (Price 21s.)

Enquiries for any of these should be addressed to The Hon. Secretary, Society for Nautical Research, National Maritime Museum, Greenwich, S.E. 10.

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